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PRE - PAAD ANALYSIS
FUEL/ENERGY SECTOR REPORT

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LOUIS BERGER INTERNATIONAL INC.,
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PRE-PAAD ANALYSIS

ENERGY - FUEL SECTOR

SUMMARY AND CONCLUSION

1. Introduction and objectives

Zaire's distribution sector has been in a crisis situation for the past few years, characterized by a lack of supplies and a shortage of petroleum products in most regions, particularly in the southern (SHABA) and eastern (KIVU) parts of the country.

Moreover, the distribution companies responsible for collecting the parafiscal taxes included in the pricing structure for petroleum products have not been able to pay their taxes regularly, in particular those owing to the National Roads Office (Office des Routes), due to their own financial difficulties.

Many factors including obstacles at the institutional level, inadequate provision for distribution costs in the petroleum pricing structure, the chronic shortage of hard currency, and the mounting arrears for the government's consumption have contributed to this situation.

Following a request by the Conseil Exucutif, USAID is prepared to support the fuel sector and set up a \$30 million foreign exchange assistance program to finance petroleum product imports. The corresponding local currency generated by these imports would be earmarked for investment in the road sector.

The objective of this report is to prepare an analysis of the fuel sector and present a set of recommendations on which to base the USAID program.

2. Supply and distribution system

2.1 The infrastructure

The existing infrastructure does not permit a regular distribution of petroleum products throughout the country. Some facilities are run down and poorly maintained. A single large investment of \$30 million for repairs to the two Matadi-Kinshasa pipelines in 1984-1987 has been made during the last fifteen years.

2.2 The participants

Until 1989 the distribution of fuel in Zaire was carried out by four companies: the government-owned PETROZAIRE and three mixed-capital ownership firms (40% state, 60% private): FINA, MOBIL, and SHELL. The liberalizing of the distribution sector has opened up the internal market to other participants:

- joint ventures between PETROZAIRE and the corporations ELF -AQUITAINE for the western and southern markets and AGIP for the eastern region. PETROZAIRE has become a holding company which will manage the government's participation in the distribution companies.
- the creation of small private Zairian companies: ZAIRE OIL, LUBINJI, YOSHAD, MADOVA. The commercial activities of these companies are limited to the SHABA region in southern Zaire where they serve the large state-owned company (GECAMINES).

Finally there are a number of small retailers who buy petroleum products in 200 liter drums from the distribution companies (minimum purchase 5 drums per transaction). These small retailers mainly supply the areas in the interior of the country not covered by the distribution firms.

2.3 Organization of imports

Until 1985 PETROZAIRE had a monopoly on the importing of petroleum products; distribution companies were only involved in marketing activities. In June 1985, the Conseil Executif decided to liberalize this sector by allowing distribution companies to import refined products for themselves. However, given the rigidity of the market, the financial problems of the distribution companies and the need to import in bulk, imports are pooled. The Comité d'achat was thus created as a coordinating body for importers. It is responsible for putting out calls for tender, choosing suppliers, negotiating prices, insuring purchase planning, and overseeing supply contracts.

In practice, PETROZAIRE, which holds the position of secretary on the committee since May 1988, is in charge of petroleum products supplies throughout the country. Distribution companies only play an advisory role which considerably limits their choices.

In actual fact, the Comité d'achat does not ensure the easing of import restrictions as touted by the authorities nor does it favor competition between the distributors by allowing them to choose their suppliers.

3. Oil consumption in Zaire

3.1 Fuel

Petroleum products make up a small part of the country's energy requirements, accounting for only 7% of total consumption. If only commercial energy consumption (charcoal, fuel, and electricity) is taken into consideration, fuel represents 57%, equivalent to 30 kg of oil per person per year. This is very low compared to other sub-saharan African countries where the average is 140 kg OE. The situation is all the more disturbing because Zaire's oil consumption has remained almost static at 700,000 tons over the last ten years. This is due to several factors:

- low level of industrial development
- shortage of hard currency to buy imported products
- lack of an adequate transportation infrastructure
- a freeze on oil prices

3.2 Consumption of products by region

Consumption varies considerably from region to region. Together, Kinshasa and Bas-Zaire account for 65.5% of the country's total consumption while the southern (SHABA) and eastern (KIVU) regions account for 13.5 and 2% respectively. To these regional disparities is also added a marked difference in the type of product consumed.

Gasoline, kerosene, and fuel oil make up 18.5%, 25%, and 6% respectively of total consumption.

An examination of product consumption by region reveals that the differences are very marked in the southern and eastern regions. In the south, this is due to the presence of the state mining company (GECAMINES) which consumes 80,000 m3 of diesel fuel or almost 70% of the total consumption in the south.

3.3 The parallel market

It is extremely difficult to estimate the size of the parallel market. Two factors, however, have been essential to the development of a black market in the southern and eastern regions of Zaire:

- the changes in official oil prices
- the shortage of supplies.

The first often leads to the second which has been the case in recent years. The variation in the pricing formula due to changes in taxation has been the major factor in interrupting supplies in these regions.

According to some estimates for 1989, the parallel market accounted for 50% of gasoline and diesel sales and 80% of kerosene sales in the Kivu region. In the Shaba region, black market sales represent about 10 to 20% of total consumption.

4. Supply structure for petroleum products

Petroleum product supplies enter the country by three different routes:

4.1 The west

The western route which accounts for 85 to 90% of the country's needs is supplied by local production from the SOZIR refinery (40%) and direct imports (60%). Although the refinery has a nominal refining capacity of 750,000 tons per year, the output attained from treating crude oil limits the actual capacity of the facility to 300,000 tons. This is enough to saturate the internal fuel oil market without producing surplus fuel requiring exportation.

The remainder of supplies entering the west (50%) are direct imports from other African countries (Ivory Coast, Gabon, and the Congo).

4.2 Southern and eastern regions

The southern route accounts for 7% of the country's needs and is supplied via South Africa (Durban): 80% and Tanzania (Dar es Salaam): 20%.

The eastern route, 3% of the country's needs, is supplied mainly via Kenya (Nairobi).

4.3 Cost of imports

Due to the high cost of freight, import costs for the eastern and southern routes (approx. 350 \$/m3) are double the import costs for the western route. This doubling of costs can be explained by the high cost of transport: 120-145 \$/m3 from Durban, 160 \$/m3 from Nairobi, but also by the supplier's mark-up of 40 to 90 \$/m3 depending on the product. This mark-up, which is separate from the usual refinery margin, is related to the export opportunities available to the suppliers but may also be the result of overcharging by the importers.

5. Price structure for petroleum products

5.1 Evolution of prices

Prices for petroleum products in Zaire have undergone two phases:

- A. A price freeze from 1974-1988. During this period the selling price to consumers did not cover the actual costs in real terms. Consequently, the distribution companies gave precedence to supplying the western regions of the country (Kinshasa, Bas Zaire) while neglecting the outlying regions (east and south) where the high cost of distribution was not covered by the selling price. As a result, these regions suffered an interruption in supplies and shortages.
- B. a price adjustment phase beginning in November 1988 which resulted in two large price hikes, the first in November 1988 (an average of +50%), the second in February 1989 (+100% for prices in the west and +300% for prices in the south and east).
As of November 1988, the price of petroleum products is adjusted monthly according to the change in the import costs and the exchange rate between the Zairian currency and the American dollar.

5.2 Comments on the current pricing system

The current price-fixing system has been working relatively well since November 1988. However, several factors should be noted:

- the pricing system is controlled.
The Conseil Executif reserves the right to refuse price adjustments for political or non-economic reasons.

- the system does not promote open competition; uniform prices are set for consumers. Consequently, distribution companies are not encouraged to increase productivity within the sector.
- Sunk costs should be recovered and not the economic costs through a rationalization of the sector. In this way the system undergoes a standardization of prices according to region (cross subsidy).

6 The price maxima system for petroleum products

6.1 The principles of the system

To overcome the inadequacies of the current price structure, the Conseil Executif has proposed a new pricing system based on the following principles:

- the price of refined products will be determined simply and objectively, taking into account the actual costs. This includes the cost of imported raw materials calculated with import costs (CIF international port price), the actual distribution costs adjusted to inflation and the Zaire/dollar exchange rate.
- this is the price maxima (or ceiling price) which distribution companies are authorized to charge. All companies can offer rebates to their clients in the spirit of competition.
- there will be no more standardization of prices in advance by the Conseil Executif. Prices are adjusted monthly. Nevertheless, the government reserves the right to retroactively control the companies' profit margin.

6.2 Expected results of the system

The price maxima system is a compromise between a complete freeing of prices and the current system. It is nonetheless a decisive step towards liberalizing Zaire's oil prices in that it addresses the problem of implementing a long-term recovery process for the distribution sector on the one hand and of supplying the internal market under the most favorable cost and quality conditions for the country on the other.

The price maxima system should have the following positive effects: rebuilding of the companies' financial situation,

revitalizing sales in the interior of the country, rebuilding of 15-45 day working stocks, shrinking of the parallel market, increased competition.

However, the expected positive results of the price maxima system could be impeded over the short term by certain factors, particularly by the presence of cartels within the sector, the necessary financial adjustments of the oil companies who suffered substantial losses during the period when prices were frozen, the chronic foreign exchange shortage, and the high cost of transport.

7. Taxation

7.1 Calculation of the tax basis

Until the end of 1989 petroleum taxes were calculated on the basis of the average price of imported products and included an import duty of 15%, an excise tax of 15%, and a transportation surtax of 15-55% depending on the product.

This method of calculating prices had two major drawbacks:

- it amplified international price variations and projected them onto internal prices;
- tax revenues varied according to international market price fluctuations.

To eliminate these drawbacks, the IMF recommended isolating the calculation of the tax basis from the international market. Since February 1990, the tax basis is calculated on the market price list in \$/ton.

7.2 Terms of payment for taxes

Since February 1989, the Office des Douanes et Accises (OFIDA) is responsible for collecting all petroleum taxes for the Tresor Publique and the transportation agencies.

An agreement between the tax office and the oil industry states that taxes must be paid within 90 days after the product's date of entry. This period will be shortened to 60 days on April 1, 1990.

The Conseil Executif undertakes to pay for government consumption within 90 days of the billing date. However, this commitment has not been honored and arrears have been accumulating as a result of the government's delay in paying.

Upon receipt of the taxes from the companies, OFIDA conveys the taxes to the various beneficiaries within 15 to 30 days

according to the following scale:

- Public treasury: 44%
- Department of Roads: 43%
- others 13%

8. Recommendations for the implementation of PAAD

The fuel-energy sector's reform program has two objectives:

- to supply the internal market at the lowest possible cost to the country as a whole.
- to effect the payment of the parafiscal petroleum taxes to the transportation agencies responsible for the management and maintenance of the transportation infrastructure.

In order to meet these objectives, several steps must be taken to eliminate the obstacles that remain throughout the distribution sector on the one hand and to insure that the transportation agencies receive their tax revenues on the other.

Consequently, the USAID program for financing the importing of petroleum products should only be implemented after certain conditions in the fuel and particularly the transportation sector have been met.

These prerequisites can be grouped into major and minor categories. The major conditions are essential if the objectives set out by USAID are to be met. The minor conditions, on the other hand, will not jeopardize the project if they remain unfilled.

8.1 Prerequisites for the fuel sector

8.1.1 Major conditions

A. Liberalization of petroleum product prices.

The implementation of the maxima price system is essential to rebuilding the distribution sector and constitutes an intermediate step towards freeing product prices. Priorities include:

- ensuring that the maxima price system is put into place to avoid the prior standardizing of prices by the Conseil Executif
- establishing a timetable for the liberalization of prices

It should be noted, however, that the price maxima system can be substituted for a completely liberalized system over the medium term insofar as it takes into account the actual costs

of importation and distribution, these costs being adjusted annually in \$/ton according to the US consumer price index.

B. Lifting of import restrictions on petroleum products

In order to ensure that the selling and financing of imported products are carried out under optimal conditions, competitive bids should be opened up to all supplier members of the World Bank and not limited, as they are now, to members of the Communauté Economique des Etats de l'Afrique Centrale.

C. Operation of the Comité d'achat

The Comité d'achat must be independent of the government-owned PETROZAIRE. To this end:

- distribution companies must have a real say in the Comité d'achat. The dominant role of PETROZAIRE must be curtailed so that other companies are placed on an equal footing with the government-owned company.
- the Comité d'achat must be the sole body responsible for releasing international calls for tender and for signing supply contracts.

8.1.2 Minor prerequisites

A. Liberalization of the internal market distribution.

Two steps could be taken by the authorities in order to ensure a better supply to the interior of the country:

- legalizing the resale of products by small merchants, subject to certain regulations
- reducing the required minimum purchase of 5 drums to 1 drum for small merchants

B. Operating procedures for Zaire-Oleoduc

Distribution companies must be allowed to participate in the managing of the proposed company Zaire-Oleoduc, whose role will be to manage the planned Muanda-Matadi pipeline.

C. Sectorial studies

Zaire's fuel sector is poorly understood due to the lack of studies or sectorial analyses. The following studies are recommended:

- A study of distribution and transportation costs

Distribution and transportation costs contained in the oil pricing structure are very high compared with other African countries and there is a potential for increased productivity in this area. An indepth study of these costs would reveal the relevant factors.

- A study of fuel consumption

No reliable statistics are currently available on the consumption of petroleum products based on the branch of industry and the region. Consequently, it is impossible to make accurate projections or to measure the effects of price fluctuations on sectorial demand on a regional and national level. This last point is especially important given the nominal change in prices.

Such a study should, therefore, gather statistics according to the demand in specific sectors (transportation, industry, mining, energy) and according to region.

8.2 Prerequisites for the transportation sector

8.2.1 Major conditions

A. Honoring of the terms of payment for parafiscal taxes.

The strict honoring of the terms of payment for petroleum taxes by the distribution companies to OFIDA is imperative to the proper functioning of the transportation agencies. Therefore, taxes must be paid within 60 days of the entry date of the product. These terms can only be respected by distribution companies if consumption by the government and parastatal companies is also promptly paid, within 120 and 90 days respectively of the date the product was placed at their disposal.

B. Remittance of taxes by OFIDA to the transportation agencies

OFIDA must redistribute the petroleum taxes to the transportation agencies within 15 days of receipt of payment from the oil companies.

C. Payment procedures for government consumption

To avoid delays in payments for government consumption, the Budget Department must set up a special budget procedure:

- by instituting a rapid payment dispersement system, on a monthly basis for example

- by giving priority to the allocation of petroleum taxes to transportation agencies in case of a default by the government on its payments for 30 consecutive days.

8.2.2 Minor prerequisites

A. Establishment of new buying procedures

Government consumption must be open to competitive bids in order to benefit from optimal buying conditions, in keeping with the maxima price system.

B. Paying of arrears

The current situation of arrears between the government, the parastatal companies, and the participants in the distribution system must be resolved and a timetable set up for the paying of arrears.

PRE-PAAD ANALYSIS
ENERGY - FUEL SECTOR

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CHAPTER 1

INTRODUCTION AND OBJECTIVES

Zaire's economic reforms, undertaken with the support of its financial backers, are aimed at stimulating the country's economic growth. This growth is only possible particularly in agriculture, if an adequate infrastructure is in place.

Since 1987, the National Roads Office (Office des Routes), the main body in charge of managing the country's road network, has dramatically curtailed the amount of maintenance and rehabilitation work carried out as a result of an acute financial crisis.

The crisis situation was mainly caused by the difficulties in collecting parafiscal taxes contained in the pricing structure of petroleum products, which make up 75% of the department's revenues.

The fuel distribution companies who are responsible for collecting and remitting the surtax have had financial problems of their own over the last few years. These difficulties are the result of a malfunctioning of Zaire's distribution sector, characterized by obstacles at the institutional level, inadequate provision for distribution costs in the fuel pricing structure, arrears in payments for public and semi-public consumption, and the chronic shortage of hard currency.

Despite some measures undertaken by the authorities, a major restructuring of the energy-fuel sector in order to increase efficiency has not been forthcoming.

Following a request by the Conseil Executif, USAID is prepared to support the fuel-energy sector and set up a \$30 million hard currency assistance program to finance petroleum product imports. The corresponding local currency generated these imports would be earmarked for road maintenance and rehabilitation as well as improving management of regional agencies involved in the transport sector.

To meet this objective USAID will examine the conditions for implementing such a program. The objective of this report is to prepare an analysis of the fuel sector and present a set of recommendations on which to base the USAID program.

This study will examine the fuel sector by concentrating on the following elements:

- the supply and distribution system
- consumption
- the supply structure
- the pricing system for petroleum products
- taxation

CHAPTER 2

THE SUPPLY AND DISTRIBUTION SYSTEM FOR PETROLEUM PRODUCTS

The distribution sector has been in a crisis situation for the past few years, characterized by a lack of supplies and by a shortage of petroleum products in most regions, particularly in the southern (SHABA) and eastern (KIVU) parts of the country.

Many factors including the inadequate infrastructure, the lack of a permanent working arrangements, and incomplete legislation to allow for the normal functioning of this sector have contributed to this situation.

2.1 Infrastructure

The infrastructure for Zaire's fuel supply and distribution system is composed of the following major installations:

- unloading facilities for tankers in Matadi and Muanda;
- the SOZIR refinery in Muanda with a nominal capacity of 750,000 tons per year and a storage tank capacity of 160,000 m3;
- a fleet in the coastal zone of the Zaire River consisting of 3 push boats and 6 - 1800 m3 barges, which are used for unloading the tankers and transporting the refined products between Muanda and Matadi;
- transit depots in Matadi (76,000 m3) and Kinshasa (75,000 m3);
- two six-inch pipelines from Matadi to Kinshasa with a nominal capacity of 1.4 million m3 per year;
- thirty or so regional depots totalling 90,000 m3, including Ilebo 23,000 m3, Kisangani 11,500 m3, Akati 13,000 m3.
- river, rail, and road transportation networks for the interior of the country.

The existing infrastructure does not allow for a regular distribution of petroleum products throughout the country. Some facilities are run down and poorly maintained. A single large investment - repairing the two Matadi-Kinshasa pipelines in 1984-1987 for \$30 million - has been made in the last fifteen years.

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A 1987 study by the French research group TECHNIP states that the existing infrastructure must be expanded by:

- constructing an off-shore unloading facility for tankers. Tankers are currently unloaded by barges which takes an average of three days.
- placing a buoy off Muanda
- constructing an undersea pipeline from Muanda to the SOZIR site
- constructing a 125 km pipeline from Muanda to Matadi

Among these projects, the most urgently needed as well as the most profitable would be the Muanda-Matadi pipeline at an estimated cost of \$22 million. This investment would reduce transportation costs by approximately \$8 million per year at present rates of traffic by eliminating the tanker run between Muanda and Matadi.

According to the World Bank the project would be a joint venture between state and private companies, the financing provided jointly with the Italian government through a Energy Sector Adjustment Credit.

2.2 Distribution

2.2.1 Jurisdiction

The distribution of petroleum products falls mainly under the jurisdiction of the National Economy and Industry Department and the Department of Mines and Energy, which provides a link between the administration and the other participants. This authority extends over:

- supplies
- product prices

The Department of Mines and Energy is more specifically involved with:

- security for supplies
- quality control of the products
- organizing the distribution

The National Economy and Industry Department is the body which fixes prices.

2.2.2 The Participants

The distribution of petroleum products in Zaire is carried out by two categories of participants: distribution companies and the Zairian company SEP which handles the transport of petroleum products for the whole country.

A. The distribution companies

Until 1989, petroleum products were distributed by four companies:

- the crown corporation PETROZAIRE which was created in January 1978
- three business corporations with mixed capital (40% state, 60% private): FINA, MOBIL, and SHELL

The market share of each company in 1989 was as follows: FINA 40%, MOBIL 24 %, SHELL 21 %, PETROZAIRE 15%. These figures will change considerably over the next few years due to the 1989 opening up of the distribution market to other participants:

- two joint ventures, the PETROZAIRE corporation with the international corporations ELF-AQUITAINE for the western and southern markets and with AGIP for the eastern markets. PETROZAIRE has become a holding company which will manage the government's share in the distribution companies;
- small private Zairian companies: ZAIRE OIL, LUBINJI, YOSHAD, MADOVA. The commercial activities of these companies are limited to the SHABA region in southern Zaire where they mainly work for the large government corporation (GECAMINES);
- there are a number of small retailers who buy products in 200 litre drums from the large companies. Current regulations stipulate that these retailers must buy a minimum of 5 drums per transaction. These small retailers mainly supply the market in the interior of the country which is not covered by the distribution companies.

B. Transport-Storage

Zaire-SEP, a mixed company which is 42.6 % state owned and 57.4% privately owned by international corporations: PETROFINA (36.6%), MOBIL (7.8%), and SHELL (13%), enjoys a monopoly of the storage, transport, and distribution of petroleum products throughout the country for the distribution companies;

The State effectively controls the corporation since it provides 4 out of the 10 administrators (including the President du conseil). Furthermore, the company statutes stipulate that no decision can be made if two administrators vote against the proposal.

PETROFINA plays a dominant role in the current management of the company because of the technical assistance it provides to Zaire-SEP.

2.3 Organization of imports

Until 1985 PETROZAIRE had a monopoly on the importing of petroleum products; distribution companies were only involved in marketing activities. In June 1985, the Conseil executif decided to liberalize this sector by allowing distribution companies to import refined products for themselves.

Nevertheless, given the rigidity of the market, the financial problems of the distribution companies and the need to import in bulk to reduce freight costs, imports are pooled.

In this capacity the Comité d'achat, created as a coordinating body for importers and under the auspices of the Department of Mines and Energy, puts out calls for tender, chooses suppliers, negotiates prices, ensures purchase planning, and oversees the supply contracts. This procedure applies only to shipments entering via the west via Matadi; these measures are not applied to imports in the east or the south. Import contracts in the west are open to competitive bids according to the provisions governing procurement contracts. Despite the fact that any foreign company can submit a bid, there is a clause which states that international participation must be limited to companies from the "Communauté Economique des Etats de l'Afrique Centrale" (CEEAC) Unofficial translation: Economic Community of Central African States. This provision does not guarantee the lowest priced supply of petroleum products and is, moreover, contrary to IDA regulations.

In practice the government-owned company PETROZAIRE, which holds the office of secretary since May 1988 (circular May 23 1988), is in charge of petroleum product supplies throughout the country. Distribution companies only play an advisory role in striking deals and in managing supply contracts. Thus, the established practices of the Comité d'achat limit the choices of the participants.

In actual fact, the Comité d'achat does not promote the easing of import restrictions as touted by the authorities nor does it favor open competition between distributors.

2.4 Current legislation

The supply and distribution sector of petroleum products is governed by an incomplete body of legislation (lack of an outline law for imports and distribution). There is some confusion as to which laws are in force. Thus some provisions created by ordinances before 1985 were later modified by circulars at the time when import restrictions were being eased. No ordinance was ever issued to confirm the changes. Particularly:

- the "Ordinance 81-004" of February 14, 1981 which stipulates that importing and exporting of hydrocarbons and their derivatives are the monopoly of the State and shall be carried out by PETROZAIRE. Nonetheless, companies or persons may import or export certain products under the conditions set out in the specifications and with the authorization of PETROZAIRE. The gouverneur of the Banque du Zaïre released a circular on June 5 1985 announcing that in accordance with the decision of the Executive Council, oil companies could now import without the prior authorization of PETROZAIRE.
- the "Ordinance 84-145" of July 2 1984 surrendering the State's participation in petroleum distribution companies to PETROZAIRE which was invalidated by a letter (no. 134/cab/MINES) on August 19, 1985.

Appendix 1 gives the main legal texts concerning the distribution sector.

In order to compensate for inadequacies and to correct the anomalies in the supply and distribution system of petroleum products, a study of the operating procedures and of the institutional structure of the sector carried out by the research group TRANSENERG in March 1988 which made the following proposals:

1. importing, marketing, and distributing of petroleum products should only be undertaken with the authorization of the Conseil Executif for a renewable period of 5 years. The territory should be specified.
2. the price maxima will be set according to the rules set up by the administration, changes in international prices, and in the cost of distribution. Distribution companies can give rebates on the price maxima in the spirit of competition.

These two proposals form the basis of the reforms prepared by the Conseil Executif with the aim of improving the distribution sector in Zaïre.

CHAPTER 3

PETROLEUM PRODUCT CONSUMPTION

3.1 Position of fuel in energy consumption

Total energy consumption in Zaire is 10.4 million tons oil equivalent which represents an annual per capita consumption of 300 kg OE. Fuelwood is the principle form of energy used by households and provides 87.5% of the country's total energy supplies. Petroleum products account for only 7% and electricity for 4.5% (see table 3.1).

If only commercial energy consumption (charcoal, hydrocarbons, and electricity) is taken into consideration, hydrocarbons represent 57% of the total or 30 kg OE per person per year. This is very low compared to other sub-saharan African countries where the average is approximately 140 kg OE.

The low level of oil consumption in Zaire is mainly a reflection of the low level of development of commercial activities which require petroleum products such as transportation, industry, and mechanized agriculture.

Table 3.1 : TOTAL ENERGY CONSUMPTION

| | (in thousands of TOE) | | | | | |
|--------------------|-----------------------|-------------|-------------|-------------|-------------|--------------|
| | 1983 | 1984 | 1985 | 1986 | 1987 | Percent |
| Petroleum Products | 796 | 704 | 730 | 825 | 733 | 7.1% |
| Coal | 169 | 104 | 72 | 90 | 89 | 0.9% |
| Electricity | <u>405</u> | <u>422</u> | <u>437</u> | <u>457</u> | <u>466</u> | <u>4.5%</u> |
| Total Commercial | 1370 | 1230 | 1239 | 1372 | 1288 | 12.5% |
| Wood Fuel | <u>8400</u> | <u>8331</u> | <u>8581</u> | <u>8838</u> | <u>9103</u> | <u>87.5%</u> |
| Total Energy | 9770 | 9561 | 9820 | 10210 | 10391 | 100.0% |

Source: Département de l'Economie Nationale.

The situation is all the more disturbing because Zaire's petroleum product consumption has remained almost static at 700,000 tons over the last ten years. This is mainly due to the following factors:

- foreign exchange shortages to buy imported products
- inadequate transportation infrastructure
- a freeze on retail prices for petroleum products

3.2 Consumption by region

Consumption varies considerably from region to region. Together, the KINSHASA and BAS-ZAIRE regions account for 65.5% of the country's total consumption while the southern (SHABA) and eastern (KIVU) regions account for 13.5 and 2% respectively. (See tables 3.2.a and 3.2.b).

To these regional disparities is also added a marked difference in the type of product consumed.

The demand for oil products centers mainly on diesel fuel which represents 50% of total consumption. Gasoline, kerosene, and fuel oil make up 18.5%, 25%, and 6% respectively.

This situation is due to the fact that diesel is used in both the transportation sector and the industry and mining sectors, particularly for stationary motors.

An examination of product consumption by region reveals marked differences in the southern and eastern regions. In the south, this is due mainly to the presence of the state mining company (GECAMINES) which consumes 80,000 m3 of diesel fuel or 70% of the total consumption in the south.

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TABLE 3.2.a FUEL CONSUMPTION BY REGIONS, 1986 - 1989 (cubic meters)

| YEAR | KINSHASA | BAS-ZAIRE | BANDUNDU EQUATEUR | HAUT-ZAIRE | KIVU | KASAI | SHABA | TOTAL |
|------|----------|-----------|----------------------|------------|-------|-------|--------|--------|
| 1986 | 448650 | 105455 | 50661 | 40959 | 26765 | 63858 | 132088 | 868436 |
| 1987 | 444361 | 108553 | 48461 | 35413 | 29796 | 25074 | 121590 | 813248 |
| 1988 | 510230 | 121999 | 49155 | 28743 | 34890 | 68679 | 116518 | 930214 |
| 1989 | 490271 | 110094 | 47403 | 32794 | 17597 | 71297 | 121956 | 891412 |

Sources : 86-87 Conjoncture Economique
88-89 Marketing Companies.

Table 3.2.b : PETROLEUM BY PRODUCTS CONSUMPTION BY REGION: 1989

(thousand m³)

| | Gasoline | Kerosene | Jet Fuel | Diesel | Fuel Oil | Avgas | Total | % |
|----------------------|----------|----------|----------|--------|----------|-------|-------|------|
| Kinshasa | 123,1 | 20,3 | 169,9 | 167,7 | 14,3 | 3,8 | 490,3 | 53 |
| Bas-Zaïre | 10,4 | 5,7 | - | 47 | 46,9 | - | 110,1 | 12,5 |
| Bandundu Equateur | 6,0 | 4,0 | 1,5 | 34,7 | - | - | 47,4 | 5 |
| Haut-Zaïre | 5,4 | 2,1 | 4,3 | 2,9 | - | - | 32,8 | 4 |
| Kasaï | 6,7 | 3,6 | 1,6 | 59,3 | - | - | 71,3 | 8 |
| Kivu | 5,1 | 1,1 | 1 | 10,2 | - | - | 17,6 | 2 |
| Shaba | 10,3 | 1,1 | 4,4 | 106,1 | - | - | 121,9 | 13,5 |
| .(Gecamines | 0,5 | - | 0,1 | 84 | - | - | 84,5 | 9,5) |
| .(others | 9,8 | 1,1 | 4,3 | 22,1 | - | - | 37,4 | 4) |
| Total | 166,9 | 36,4 | 187,1 | 466 | 51,2 | 3,8 | 891,4 | |
| Percent | 18,5 | 4 | 21 | 50 | 6 | 0,5 | | 100 |

Source : ZAIRE SEP, Marketing Companies

N. B. The totals are not quite accurate because they are rounded off.

SHARE OF PETROLEUM PRODUCTS IN THE SOUTH AND EAST

| | national average | SHABA average | KIVU average |
|--------------|------------------|---------------|--------------|
| Gasoline | 18.5% | 8.5% | 29.0% |
| Diesel | 50.0% | 87.0% | 58.0% |
| Kerosene/jet | 25.0% | 4.5% | 58.5% |
| Fuel Oil | 6.0% | - | - |
| Avgas | 0.5% | - | - |

3.3 Parallel market estimates

It is extremely difficult to estimate the size of the parallel market because of the many factors which have led to its creation. Two factors, however, have been essential to the development of a black market in Zaire's eastern and southern regions: the changes in official prices for refined products and the shortage of supplies. The first often leads to the second which has been the case in recent years. Variations in the pricing structure due to changes in taxation have been one of the major factors in interrupting supplies in the southern and eastern regions.

To compensate for differences in import costs from one area of the country to another, a uniform selling price was introduced by means of a negative tax on prices in the east and the south. These subsidized products were consequently reexported to the neighboring countries (Burundi, Rwanda) exacerbating the shortage.

Tax revisions in 1988, on the other hand, led to a sharp rise in prices and encouraged parallel market sales of lower priced, illegally imported products.

Finally, the steep price increases since November 1988 have accentuated this phenomenon, particularly in the east. The price hikes have destabilized sales which almost collapsed during 1989. Diesel and gasoline sales have fallen by half and kerosene sales by a factor of 7 as shown in the following table:

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Evolution of sales in the eastern (KIVU) region
(m3)

| Year | Gasoline | Kerosene | Diesel |
|------|----------|----------|--------|
| 1987 | 7719 | 1576 | 16593 |
| 1988 | 9527 | 2537 | 19503 |
| 1989 | 5060 | 364 | 9855 |

An analysis of the sales figures for petroleum products in the east reveals a sharp decline in monthly sales after June 1989 (See table 3.3), particularly for kerosene. Of note is the fact that the retail price for kerosene in Rwanda is lower than it is in Bukavu (see table 3.4).

According to the oil industry, the decline in sales in 1989 compared to 1988 were taken up entirely by the parallel market, bolstering its share of sales to 50% for gasoline and diesel and 80% for kerosene.

Sales in the SHABA region, however, have not followed the same trend. Sales figures for 1989 attained 1987 levels.

Evolution of sales in the south (SHABA)
(m3)

| Year | Gasoline | Kerosene | Diesel |
|------|----------|----------|--------|
| 1987 | 9414 | 4165 | 107991 |
| 1988 | 7521 | 4179 | 104818 |
| 1989 | 10269 | 5575 | 106112 |

Nevertheless, a parallel market does exist but it is not as large as in the one in the east despite the substantially lower prices on the parallel market for diesel and kerosene (see table 3.5). Some estimates put sales at 10-20% of regional consumption.

Given the hypotheses that the retail prices for petroleum products are to be adjusted according to the parallel market prices in the eastern and southern regions, taxes on diesel and kerosene would have to be zero or even negative (subsidy) depending on the product.

Table 3.3: Fuel sales in the east: 1989
(m3)

| | Gasoline | Kerosene | Diesel |
|-----------|----------|----------|--------|
| January | 899 | 50 | 1874 |
| February | 1180 | 33 | 1158 |
| March | 359 | 5 | 1568 |
| April | 350 | 7 | 852 |
| May | 640 | 8 | 610 |
| June | 121 | 43 | 1209 |
| July | 276 | 2 | 300 |
| August | 211 | 20 | 321 |
| September | 95 | 124 | 221 |
| October | 130 | 47 | 367 |
| November | 471 | 5 | 780 |
| December | 327 | 12 | 595 |
| Total | 5059 | 364 | 9895 |

Source: FINA-ZAIRE

Table 3.4 : OFFICIAL PRICE AND BORDER PRICE : KIVU
(Z/liter)

| | EAST (Bukavu) | Rwanda border |
|----------|------------------|---------------|
| Gasoline | 336 | 335 |
| Diesel | 354 | 322,5 |
| Kerosene | 335 | 268 |

Table 3.5 : OFFICIAL AND BLACK MARKET PRICES : LUBUMBASHI
(Z/liter)

| | Official price Feb. 1990 | Black Market price Feb. 1990 |
|----------|-----------------------------|---------------------------------|
| Gasoline | 371 | 360 |
| Diesel | 361 | 250 |
| Kerosene | 342 | 225 |

Source : Marketing Companies

TABLE 3.6 : ADJUSTMENT OF OFFICIAL PRICES COMPARED WITH BLACK MARKET PRICES

| <u>Eastern Price</u> | <u>Gasoline</u> | <u>Kerosene</u> | <u>Diesel</u> |
|-----------------------------|-----------------|-----------------|---------------|
| Official Price | 345 | 343,5 | 363 |
| Official Price w/rebate (3) | 310,5 | 309,15 | 326,7 |
| Rwanda Price | <u>335</u> | <u>268</u> | <u>322,5</u> |
| Difference | - 24,5 | 11,15 | 4,2 |
| Fiscal tax | 112,7 | 57,8 | 101,5 |

| <u>Southern Price</u> | <u>Gasoline</u> | <u>Kerosene</u> | <u>Diesel</u> |
|-----------------------------|-----------------|-----------------|---------------|
| Official Price(2) | 371 | 342 | 361 |
| Official Price w/rebate (3) | 333,9 | 307,8 | 324,9 |
| Black Market price | <u>360</u> | <u>225</u> | <u>250</u> |
| Difference | - 26,1 | 82,8 | 74,9 |
| Fiscal Tax | 112,7 | 57,8 | 101,5 |

(1) Bukavu price

(2) Lubumbashi price

(3) This price takes into account a 10 % rebate:
This rebate is the maximum difference between the official and parallel market prices, below which it is no longer profitable to sell.

Given the expected nominal price changes for refined products (see Chapter 5) and the continuing price difference between the official price and the parallel market price, we believe the projected demand for petroleum products will stabilize at 1989 sales levels on the parallel market in the south and the east.

3.4. Projections for petroleum product consumption: 1990-1995

It is extremely difficult to predict a trend towards an increased demand for petroleum products in Zaire because of the many uncontrollable factors involved.

3.4.1 Uncertainties in demand projections

Several uncertainties remain such as:

a) the meeting of macro-economic objectives in the country:

- expected growth rate of the GNP in volume: 3.5% per year (1990-1992)
- drop in the inflation rate: 1989 : 75%
1990 : 38% end of march
20% year end
1991 : 15%

b) the availability of foreign exchange due to:

- a decrease in Gecamines's copper production in 1990-1991
- the stalemate in negotiations between Zaire and the World Bank on the Energy Sector Adjustment Credit (Energy 1) which would allow for the financing of \$75 million worth of petroleum products.

c) the deregulation of prices and of the distribution sector,

d) the effect of the expected price increases on demand,

e) the rebuilding of working stocks of distribution companies,

f) changes in public consumption,

g) the consumption of refined products on the parallel market,

h) the improvement of the transportation infrastructure,

i) the absence of reliable, detailed statistics. Depending on the source (suppliers or consumers), differences in quoted volumes can run as high as 20%.

Variations in the figures for the projections for the next 5 years demonstrate the difficulty of making predictions, all the

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more so because the underlying assumptions are not always explicit. Scenarios for the petroleum product demand can, however, be grouped into three categories:

1. optimistic outlook: average annual increase in demand : 3%.
 - World Bank
 - Oil industry
2. pessimistic outlook: average annual increase in demand: level throughout the period.
 - Oil Industry
 - Government ministries: Office des Douanes; Département des Mines et de l'Energie (only for 1990 projections)

This scenario presupposes that the constraints within the system will remain over the medium term.
3. intermediate outlook: average annual increase in demand: 1.5%.
 - * African Development Bank (Energy Sector Loan; April 1988).

3.4.2 Demand projections for 1990-1995.

The demand projections for this study will be established using the following methodology:

- the demand for each product will be divided, as far as possible into three sectors: public, parastatal, and private.
- for each sector the following assumptions are made concerning consumption of specific products:
 - a) public sector: volume of gasoline and jet fuel consumed will remain stable

b) parastatal sector:

- Gecamines: 15% reduction in diesel consumption in 1990-1991 because of an anticipated drop in activity during this period and a recouping in stages to 1989 levels over 4 years.
- Onatra: the supplier SONATRAD has projected 33,500 m3 in their planning for 1990, a drop of 9% over 1989 and a stable consumption at this level for 1991-1995.
- SNCZ: SONATRAD predicts a need for 29,000 m3 of diesel for 1990 which represents a reduction of 10% over 1989. Stable consumption at this level for 1991-1995.
- others: estimated annual rate of increase is 1.5%.

c) private sector: consumption projections by product are as follows:

- Gasoline: 1990-1991: stable at 1989 volume levels.
1992-1995: annual increase 1.5%

This hypothesis, which presupposes a neutral price effect on the demand, may be optimistic given the present inflation rate.

- Diesel: increased consumption in relation to the 1.5% expected average growth in the transport sector.
- Kerosene: stable consumption at 1989 levels. A likely increase in consumption will be offset by the substitution of kerosene by electricity.
- Fuel oil: annual decrease in consumption of 2% throughout the entire period because of the conversion by large companies (breweries, cement plants) from fuel oil to electricity.

- Rebuilding of working stocks:

Given the low level of working stocks of distribution firms (average of 15 days), the assumption is made that there will be a return to 45-day working stocks, which is equivalent to the average supply delay required for a steady supplying of the market. The building up of 30 extra days of stock would probably be carried out in two stages: 15 days in 1990 and 15 days in 1991.

- Strategic stocks:

Propositions for the creation of a strategic stockpile have not been made on the assumption that foreign exchange will be used to meet present needs as a priority.

Taking these hypotheses into consideration, two demand projections are presented: the first includes a rebuilding of working stocks, the second does not (see table 3.7, trans. note: stocks = inventories)

3.4.3 Sales projections for 1990-1991 for the southern and eastern regions

In order to determine the volume of imports by product for the southern and eastern routes, the following is assumed;

- Eastern region: A maintaining of sales volumes at 1989 levels, which also presupposes that sales on the parallel market also remain stable at present levels. This may seem optimistic given the fact that certain selling outlets may close if new government initiatives are not taken.
- Southern region: According to the oil industry a large demand potential exists that is not currently met by the retail network, particularly for gasoline. Therefore, if supply conditions were improved (i.e. availability of hard currency), sales in this region should climb to 1986 levels, approximately 13,000 m3 of gasoline and 6,100 m3 of kerosene. Diesel sales should decline following a drop in consumption by Gecamines of -12,600 m3 and by SNCZ of -600 m3 due to the maintenance of locomotives and other traction equipment. This drop should, however, be partly offset by an increase in diesel consumption in the private transport sector.

TABLE 3.7 : DEMAND PROJECTIONS : 1990 - 1995

(000 M3)

| | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 |
|--------------------------|-------|-------|-------|-------|-------|-------|-------|
| GASOLINE | | | | | | | |
| - Consumption | 166.9 | 168.1 | 168.7 | 169.9 | 171.1 | 172.3 | 173.5 |
| - Public | 50.6 | 50.6 | 50.1 | 50.1 | 50.1 | 50.1 | 50.1 |
| - Private | 116.3 | 117.5 | 118.6 | 119.8 | 121.0 | 122.2 | 123.5 |
| - Inventories | | 7.0 | 7.0 | 0.1 | 0.1 | 0.2 | 0.2 |
| TOTAL | 166.9 | 175.1 | 175.8 | 170.1 | 171.3 | 172.5 | 173.7 |
| DIESEL | | | | | | | |
| - Consumption | 446.0 | 430.3 | 434.8 | 442.9 | 451.2 | 459.7 | 468.8 |
| - Public | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| - Gecamines | 84.0 | 71.4 | 71.4 | 75.0 | 78.7 | 82.6 | 87.0 |
| - SNCZ | 32.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 | 29.0 |
| - ONATRA | 36.5 | 33.5 | 33.5 | 33.5 | 33.5 | 33.5 | 33.5 |
| - Private | 293.5 | 296.4 | 300.9 | 305.4 | 310.0 | 314.6 | 319.3 |
| - Inventories | | 17.9 | 18.1 | 1.0 | 1.0 | 1.1 | 1.1 |
| TOTAL | 446.0 | 448.3 | 452.9 | 443.9 | 452.2 | 460.8 | 470.0 |
| KEROSENE | | | | | | | |
| - Consumption | 36.3 | 36.3 | 36.3 | 36.3 | 36.3 | 36.3 | 36.3 |
| - Inventories | | 1.5 | 1.5 | 0 | 0 | 0 | 0 |
| TOTAL | 36.3 | 37.8 | 37.8 | 36.3 | 36.3 | 36.3 | 36.3 |
| JET FUEL | | | | | | | |
| - Consumption | 187.1 | 188.5 | 190.7 | 192.9 | 195.1 | 197.3 | 199.6 |
| - Public | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 |
| - Private | 142.1 | 143.5 | 145.7 | 147.9 | 150.1 | 152.3 | 154.6 |
| - Inventories | | 7.9 | 7.9 | 0.3 | 0.3 | 0.3 | 0.3 |
| TOTAL | 187.1 | 196.4 | 198.6 | 193.1 | 195.4 | 197.6 | 199.9 |
| FUEL OIL | | | | | | | |
| - Consumption | 50.7 | 49.7 | 48.7 | 47.7 | 46.8 | 45.8 | 44.9 |
| - Inventories | | 2.1 | 2.0 | -0.1 | -0.1 | -0.1 | -0.1 |
| TOTAL | 50.7 | 51.8 | 50.7 | 47.6 | 46.6 | 45.7 | 44.8 |
| OTHERS | | | | | | | |
| - Consumption | 4.3 | 4.4 | 4.4 | 4.5 | 4.6 | 4.6 | 4.7 |
| - Inventories | | 0.2 | 0.2 | 0 | 0 | 0 | 0 |
| TOTAL | 4.3 | 4.5 | 4.6 | 4.5 | 4.6 | 4.6 | 4.7 |
| TOTAL (stocks) | 891.3 | 913.8 | 920.4 | 895.5 | 806.3 | 917.5 | 929.4 |
| (increase) | | 2.5 | 0.7 | -2.7 | 1.2 | 1.2 | 1.3 |
| TOTAL (no stocks) | 891.3 | 877.3 | 883.6 | 894.2 | 905.0 | 916.1 | 927.9 |
| (increase) | | - 1.6 | 0.7 | 1.2 | 1.2 | 1.2 | 1.3 |

Tables 3.8 and 3.9 give the sales projections by product for the Shaba and Kivu regions for 1990-1991. The projected consumption for Shaba is 113,900 m³ (compared with 121,956 m³ for 1989) and for Kivu 18,370 m³ (compared with 17,597 m³ for 1989). These projections presuppose the rebuilding of working stocks.

Table 3.8 : PROJECTED SALES SHABA REGION

(m³)

| | Consumption 1989 | Consumption 1990-1991 | Stock | Total 1990-1991 |
|--------------|---------------------|--------------------------|------------|--------------------|
| Gasoline | 10269 | 13000 | 550 | 13550 |
| Kerosene | 5575 | 6100 | 250 | 6350 |
| Diesel | 106112 | 93200 | 800 | 94000 |
| GECAMINES | 84000 | 71400 | - | 71400 |
| SNCZ(SHABA) | 2400 | 1800 | - | 1800 |
| Autres | <u>19712</u> | <u>20000</u> | <u>800</u> | <u>20800</u> |
| Total | 121956 | 112300 | 1600 | 113900 |

TABLE 3.9 : PROJECTED SALES KIVU REGION
(m³)

| | Consumption 1989 | Consumption | Stock | Total 1990-1991 |
|----------|---------------------|--------------|------------|--------------------|
| | | 1990-1991 | | |
| Gasoline | 5056 | 5100 | 200 | 5300 |
| Kerosene | 2288 | 2300 | 95 | 2395 |
| Diesel | <u>10249</u> | <u>10250</u> | <u>425</u> | <u>10675</u> |
| Total | 17593 | 17650 | 720 | 18370 |

CHAPTER 4

SUPPLY STRUCTURE FOR PETROLEUM PRODUCTS

Petroleum product supplies enter the country by three different routes:

- the western route, which accounts for 85 to 90% of the country's needs, is supplied by local production from the SOZIR refinery and direct imports.
- the southern route accounts for 7% of the country's needs and is supplied via South Africa and Tanzania (Dar es Salaam), as well as from Zambia.
- the eastern route which accounts for 3% of the country's needs is supplied mainly by Kenya (Nairobi).

Table 4.1 shows the division of the country's fuel supplies for 1979-1989.

4.1 Domestic production of petroleum products

The Muanda refinery is run by a mixed capital Italian-Zairian concern (SOZIR) 50% government-owned and 50% owned by AGIP.

4.1.1 Current situation

The refinery, with a nominal annual capacity of 750,000 tons, could in principle cover the country's total needs of 730,000 tons. In reality, the refinery has never operated at maximum capacity since 1979. It operated at 90% capacity between 1968 and 1977 and then dropped to an average of 56% capacity from 1979-1988.

Two factors have led to this situation: one structural and the other circumstantial:

1. the refinery, which was originally designed to refine light crude, is not suited to meet domestic consumption needs. The refined product yield obtained by the initial refining of crude is disproportionate to the internal demand in that it produces a surplus of fuel oil and a shortage of kerosene and diesel. To minimize financial losses, the refinery must limit its capacity to 300,000 tons/year of light Nigerian crude, which yields enough to saturate internal consumption of fuel oil and avoids producing surplus fuels requiring export. Table 4.2 shows the product yield of crude and the domestic consumption of each product.

Table 4.1 : Fuel Supply and Utilization, 1979 - 1989, metric tons

| Local Production | Imports Via | | | Est | Total | Total | | | Consumption | Fuel Oil Exports | Stock Change |
|---------------------|-------------|---------|--------|--------|---------|-----------------|---------|---------|-------------|---------------------|-----------------|
| | Matadi | South | | | | Prod. + Imports | | | | | |
| 1979 | 402,606 | 338,100 | 50,960 | 11,480 | 400,549 | 803,157 | 688,639 | 138,422 | (23,904) | | |
| 1980 | 429,796 | 385,777 | 45,135 | 14,001 | 444,913 | 874,709 | 720,463 | 137,224 | 17,022 | | |
| 1981 | 286,544 | 457,163 | 13,129 | 23,440 | 493,722 | 780,266 | 763,979 | 60,640 | (44,353) | | |
| 1982 | 102,481 | 594,229 | 0 | 12,094 | 596,323 | 608,804 | 663,086 | 12,537 | 33,181 | | |
| 1983 | 46,685 | 679,162 | 2,004 | 11,902 | 893,068 | 739,753 | 691,027 | 2,627 | 46,099 | | |
| 1984 | 182,023 | 467,000 | 678 | 16,305 | 483,983 | 666,006 | 656,805 | 7,002 | 2,199 | | |
| 1985 | 5,049 | 672,482 | 20,673 | 9,206 | 702,361 | 707,410 | 678,928 | 0 | 28,482 | | |
| 1986 | 60,693 | 559,180 | 64,580 | 17,773 | 641,533 | 702,226 | 721,585 | 0 | (19,359) | | |
| 1987 | 203,494 | 437,589 | 54,044 | 21,447 | 513,080 | 716,574 | 666,875 | 504 | 49,195 | | |
| 1988 | 272,470 | 479,110 | 53,905 | 25,607 | 558,622 | 831,092 | 761,876 | 548 | 68,668 | | |
| 1989 | 310,376 | 324,660 | 60,786 | 12,002 | 397,428 | 707,795 | 728,702 | 0 | (20,907) | | |

Source : Département de l'Economie Nationale et de l'Industrie, conjoncture Economique, various issues.

Table 4.2 SOZIR PRODUCTION BY PRODUCT: 1989

| Product | Production | | Consumption |
|----------|------------|-------|-------------|
| | (Tons) | (%) | (%) |
| Diesel | 126,507 | 40.8 | 50.1 |
| Kerosene | 67,519 | 21.7 | 25.2 |
| Gasoline | 62,517 | 20.2 | 18.2 |
| Fuel Oil | 53,445 | 17.2 | 5.8 |
| Others | 380 | 0.1 | 0.1 |
| <hr/> | | | |
| Total | 310,367 | 100.0 | 100.0 |

Source: Comite d'achat

2. The development of a world wide, over-capacity in the area of refining over the last ten years has caused a drop in the relative price of refined products in relation to crude oil. It has become much more profitable for the country to import refined products directly rather than import crude and refine it locally.

This situation led to the temporary shutdown of the refinery in 1985.

4.1.2 Outlook for domestic production

Profitability studies of the refinery have revealed several possible courses of action: the closing of the plant, maintaining present services or modernizing the facilities.

- A. Modernizing the refinery: feasibility studies have shown that the installation of a secondary conversion unit (thermocracker or hydrocracker for an estimated cost of \$40-80 million), which would allow for a more efficient use of heavy crude by producing more highly refined products and less heavy fuels, would not be profitable. This alternative has therefore been rejected.
- B. A complete shutdown of the refinery has also been rejected by the authorities. The refinery in fact insures:
 - greater security in providing fuel supplies to the country.
 - a better adaptation of domestic production to internal market demands.
- C. Consequently, the government has opted for the solution of keeping the refinery running under the following conditions:
 - a minimum investment to improve the efficiency of its storage procedures to meet the distribution needs of the future Muanda-Matadi pipeline.
 - internal reorganization in order to reduce excessive operating expenses. Current operating expenses are \$22.1/ton for the refining of 300,000 tons per year. These costs could be brought down to \$15/ton after reorganization. This would - taking into consideration the \$9/ton fee contained in the processing contract - result in a net loss of \$6/ton as compared with the present \$13/ton. SOZIR's services are presently covered by two royalties contained in the pricing structure for petroleum products: one on the unloading of boats and storage, the other on the refining process.
 - optimization of the production at 300,000 tons per year through processing, which would leave an annual balance of 400,000 tons to be imported.

4.2 Import structures

4.2.1 Import structure according to source

A. Importation via the western route

Imports via the western route account for 55% of total refined-product imports. These imports travel via the Atlantic ports of the African countries, Ivory Coast, Gabon, and the Congo.

In July 1988, following a decision at the summit of the "Economie Communauté des Etats de l'Afrique Centrale (CEEAC)" to strengthen inter-community trade, the contract with the company PETROBAS was cancelled and a limited international call for tenders was launched among suppliers within the CEEAC. This led to an agreement with a supplier which groups together Elf Aquitaine, the Société Gabonaise de Raffinage, and the Société Congolaise de Raffinage.

B. Importation via the southern route (SHABA)

Imports in the south arrive mainly from two sources:

- imports from South Africa (Durban) account for approximately 80% of imports entering the south. The products are transported by rail from Durban to the border town of SAKANIA, in Zaire.
- Tanzanian imports originate in the port of Dar es Salaam and travel to LUBUMBASHI by road. Imports from the NDOLA refinery in ZAMBIA have almost completely stopped because of the impossibility of ensuring regular shipments from this source.

C. Importation via the eastern route (KIVU)

Because of the region's isolation from the rest of the country, imports via the eastern route are used exclusively in the eastern region of the country (KIVU). Imports are transported by means of tanker trucks:

- either from Nairobi, Kenya via Uganda
- or from El-Doret, border town between KENYA-UGANDA

The following table shows the flow of imports according to region.

| | Participant | Origin | Volume(m3) | Percent |
|-----------------|---------------------|-------------------------------|------------|---------|
| Western route: | Elf contract | Ivory Coast Gabon Congo | 406,250 | 100% |
| Eastern route: | Local oil companies | Kenya | 17,600 | 100% |
| Southern route: | Local oil companies | South Africa | 58,000 | 80% |
| | | Tanzania | 14,500 | 20% |

4.2.2 Supply by product for Zaire's southern and eastern routes

The south is supplied from two sources: the western route eg. Matadi and imports originating from the south.

Petroleum product imports entering the west account for almost the south's entire requirement for gasoline (90%) and for jet fuel (100%). Diesel supplies account for about 36%. (see table 4.3). Imports entering the south make up the rest: gasoline (10%) and diesel (64%).

The following table gives the percentage of each product imported to the south according to import route

| | West Matadi | South |
|----------|----------------|-------|
| Gasoline | 90% | 10% |
| Jet fuel | 100% | 0% |
| Diesel | 36% | 64% |

The eastern route is exclusively supplied via Kenya (see table 4.4)

Table. 4.3 : SOUTH FUEL IMPORTS ,(cubic meter)

| 1986 | Ex-West | Ex-South | Total Consumpt. | |
|-----------|---------|----------|-----------------|--------|
| Gasoline | 11484 | 2376 | 13860 | 11484 |
| Diesel | 60828 | 74712 | 135540 | 112055 |
| Jet/Kero. | 5964 | 0 | 5964 | 6248 |
| | ----- | ----- | ----- | ----- |
| | 78276 | 77088 | 155364 | 129787 |
| 1987 | Ex-West | Ex-South | Total Consumpt. | |
| Gasoline | 8448 | 1612 | 10060 | 9414 |
| Diesel | 45756 | 62918 | 108674 | 107991 |
| Jet/Kero. | 3780 | 0 | 3780 | 4185 |
| | ----- | ----- | ----- | ----- |
| | 57984 | 64530 | 122514 | 121590 |
| 1988 | Ex-West | Ex-South | Total Consumpt. | |
| Gasoline | 7380 | 703 | 8083 | 7521 |
| Diesel | 41264 | 63554 | 104818 | 104818 |
| Jet/Kero. | 4416 | 0 | 4416 | 4179 |
| | ----- | ----- | ----- | ----- |
| | 53060 | 64257 | 117317 | 116518 |
| 1989 | Ex-West | Ex-South | Total Consumpt. | |
| Gasoline | 10157 | 1528 | 11685 | 10269 |
| Diesel | 42385 | 75998 | 118383 | 106112 |
| Jet/Kero. | 5034 | 0 | 5034 | 5575 |
| | ----- | ----- | ----- | ----- |
| | 57576 | 77526 | 135102 | 121956 |

Source : Petrozaire, Comité d'Achat

Table.4.4 : EAST FUEL IMPORTS (cubic meter)

| 1986 | Ex-East | Consumpt. |
|-----------|---------|-----------|
| Gasoline | 6565 | 6455 |
| Diesel | 17380 | 16813 |
| Jet/Kero. | 3625 | 3497 |
| | ----- | ----- |
| | 27570 | 26765 |
| 1987 | Ex-East | Consumpt. |
| Gasoline | 7080 | 7719 |
| Diesel | 15358 | 17602 |
| Jet/Kero. | 4186 | 4475 |
| | ----- | ----- |
| | 26624 | 29796 |
| 1988 | Ex-East | Consumpt. |
| Gasoline | 8754 | 9527 |
| Diesel | 18051 | 19512 |
| Jet/Kero. | 5021 | 5651 |
| | ----- | ----- |
| | 31826 | 34890 |
| 1989 | Ex-East | Consumpt. |
| Gasoline | 5153 | 5056 |
| Diesel | 10971 | 10249 |
| Jet/Kero. | 2204 | 2288 |
| | ----- | ----- |
| | 18328 | 17593 |

Source : Petrozaire,Comite d'Achat

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4.3 Cost structure according to source

The cost of products are compared according to their origin. The comparison is made based on the official price structure for petroleum products on February 5, 1990.

The average CIF balanced border cost is calculated as follows:

A. Imports via the western route:

The average balanced cost for eastern imports is \$207.76 per ton or 153.75 per m³. The cost is determined by the following factors:

- the transfer price from the refinery of CHEVRON products calculated on the basis of Platt's CIF NWE quotation which equals \$195/ton, for 60% of total imports.
- the import transfer price for Elf-Aquitaine products calculated on the basis of Platt's CIF NWE quotation which is \$226.91/ton for 40% of total imports.

Although the reference quotes are the same for both sources (CHEVRON and Elf-Aquitaine), a difference in transfer prices exists.

This difference is due to variations in international prices between the unloading dates of shipments and to the fact that shipments from Elf Aquitaine are delivered to Matadi while those from Chevron are delivered to Muanda.

The freight cost difference between Muanda and Matadi is around \$7.50/ton.

B. Imports via the southern and eastern routes:

The average weighed cost for imports arriving via the southern and eastern routes is determined on the basis of the border price, Sankia, for the southern route and Bukavu for the eastern route. These prices include the refinery price plus the transport costs to the Zairian border. From information given by the import firms, the import cost can be reconstructed from the purchase and transport costs.

The transport costs according to origin are given below:

Eastern route: average freight cost Nairobi - Kivu = \$160/m³

Southern route: average freight cost Durban - Sakanian = \$120-145/m³

Based on the average balanced price of imports as calculated in the price structure for February 1990 and on the real cost of transport given above, the transfer price charged by the suppliers can be calculated as follows :

COMPARISON OF IMPORT COSTS FOR WESTERN, SOUTHERN AND EASTERN ROUTES

| US\$/m ³ | ! Import cost | ! Base price | ! Import cost Eastern Route | | ! Average | | ! Ratio |
|---------------------|------------------|----------------|-----------------------------|---------------|--------------|-------------|---------|
| | ! Western Route! | ! | ! | | ! | | |
| | ! (Platt's CIF) | ! Platt's CIF! | ! Suppliers | ! Transport | ! total cost | ! | |
| | ! (1) | ! | ! Margin | ! Ex-Nairobi! | ! Price | ! structure | |
| | ! | ! | ! | ! | ! (2)/(1) | ! | |
| | ! | ! | ! | ! | ! | ! | ! |
| Gasoline | ! 153,75 | ! 153,75 | ! 58,25 | ! 160 | ! 372 | ! | ! 2,4 |
| Kerosene | ! 182,78 | ! 182,78 | ! 47,22 | ! 160 | ! 390 | ! | ! 2,1 |
| Diesel | ! 166,9 | ! 166,9 | ! 42,9 | ! 160 | ! 369,8 | ! | ! 2,2 |
| | ! | ! | ! | ! | ! | ! | ! |

| US\$/m ³ | ! Import cost | ! Base price! | ! Import cost Southern Route | | | ! |
|---------------------|------------------|----------------|------------------------------|-------------|--------------|-----------|
| | ! Western Route! | ! | ! Average | | | ! |
| | ! (Platt's CIF) | ! Platt's CIF! | ! Suppliers | ! Transport | ! total cost | ! |
| | ! (1) | ! | ! Margin | ! Ex-Durban | ! Price | ! Ratio |
| | ! | ! | ! | ! | ! structure | ! (2)/(1) |
| | ! | ! | ! | ! | ! (2) | ! |
| Diesel | ! 166,9 | ! 166,9 | ! 86,7-61,7 | ! 120-145 | ! 373,6 | ! 2,2 |

According to Platt's International CIF quotation which determines the average price for imports entering via the western route, the cost of importing from the east and the south is double the cost of importing via the west. This doubling of costs is a result of the high freight costs but also of the suppliers' mark-up of \$40-90/m³ depending on the product. This mark-up, which is separate from the usual refinery margin, is mainly related to the export opportunities in the supplying countries such as Kenya, South Africa or Tanzania over which the importing firms have no control, but apparently, the mark-up could well be the result of overcharging by importers.

This fact has prompted the Zairian government to favor imports entering via the western route, which are less expensive, and to discourage those entering the south and east.

In practice, the opposite is taking place for diesel fuel: the volume imported via the south is increasing while those from the west are decreasing.

It would seem, therefore, that the actual cost of importation via the southern, eastern route is lower than the invoiced costs contained in the official pricing structure, leaving a substantial profit for import companies.

This would explain the proliferation of private companies such as Zaire Oil, Madova, Lubunji, and Yoshad in the Shaba province. In 1989 Zaire Oil imported 22,000 m3 of diesel via the south for Gecamines or 25% of the company's consumption.

4.4 Import projections for the eastern and southern regions

Using the consumptions projections given in chapter 3.5.3 and based on the distribution of imports according to source in 1989, the volume of imports for the southern and eastern regions of the country can be determined.

Tables 4.5 and 4.6 give the estimated volume of imports for 1990/1991.

The annual cost of importing via the south and the east are \$23 and \$6.9 million respectively, an accumulated monthly average of approximately \$2.5 million. These costs are calculated on the basis of import costs stipulated in the pricing structure for petroleum products.

Table.4.5 : IMPORTS PROJECTIONS, SHABA:1990/1991

| | Consumption 1990/1991 (M3) | Import 1990/1991 ex_West ex_South (M3) | | Value (mio.\$) |
|-------------|----------------------------------|--|---------|-------------------|
| Gasoline | 13550 | 11780 | 1770 | 619.5 |
| Jet/Kero. | 6350 | 6350 | 0 | 0 |
| Diesel | 94000 | 33365 | 60345 | 22544.9 |
| (Zaire oil) | (25000) | | (25000) | 9340.0 |
| | ----- | ----- | ----- | ----- |
| | 113900 | 51495 | 62115 | 23164.4 |

Table.4.6 : IMPORTS PROJECTIONS, KIVU:1990/1991

| | Consumption 1990/1991 (M3) | Import ex_East (M3) | Value (mio.\$) |
|-----------|----------------------------------|---------------------------|-------------------|
| Gasoline | 5300 | 5300 | 1971.6 |
| Jet/Kero. | 2395 | 2395 | 934.1 |
| Diesel | 10675 | 10675 | 3949.8 |
| | ----- | ----- | ----- |
| | 18370 | 18370 | 6855.4 |

Total imports by month : 2.5 million US\$

CHAPTER 5

PRICING STRUCTURE FOR PETROLEUM PRODUCTS

Prices for petroleum product in Zaire have undergone two phases:

- a price freeze from 1974-1988
- an adjustment phase since November 1988

5.1 Evolution of prices from 1974-1988

In 1974, during the nationalization of private distribution company assets, the Zairian government introduced a price fixing formula for refined products under which:

- the retail price paid by consumers did not cover the cost of the product in real terms. (see table 5.1 and chart 5.2)
- transportation costs to the delivery point were calculated uniformly irrespective of the region or locality served. In this way, the prices of products sold in the interior of the country (east, south) were subsidized by prices in the west.

The application of this petroleum price fixing policy led the distribution firms to give precedence to supplying the western region, Bas Zaire and Kinshasa, while neglecting the outlying regions (east and south) where the high cost of distribution was not covered by the retail price. As a result, these regions suffered an interruption in supplies and oil shortages.

In September 1986, an agreement was reached between the government and the World Bank on the institution of the principles of liberalized prices and full cost recovery into the pricing formula for petroleum products.

The principle, however, was not applied. From 1986 to November 1988 the retail price was still below actual costs. A marked difference between the retail price and the cost led to:

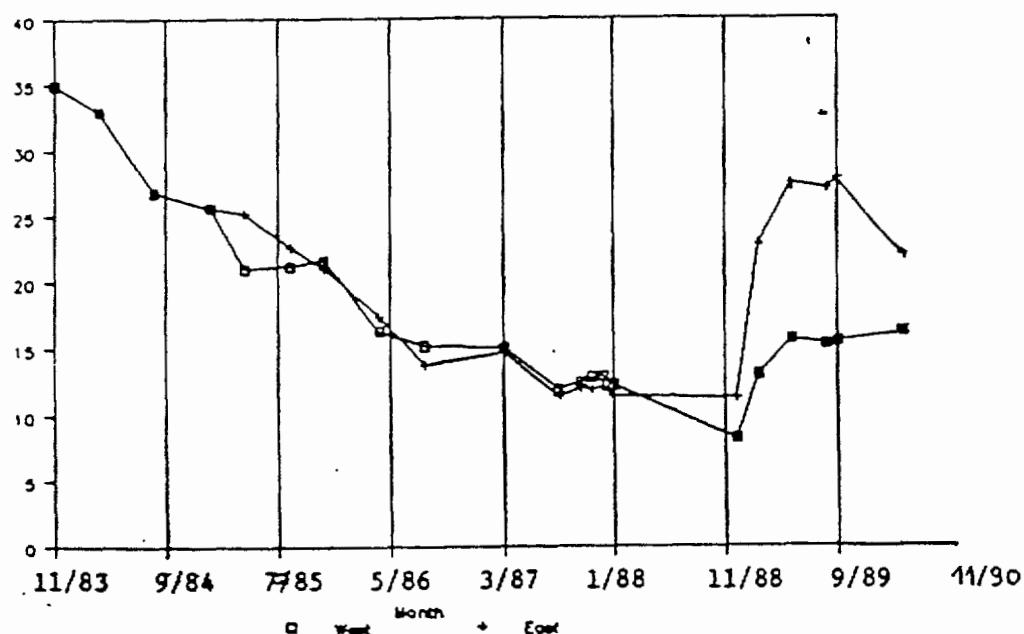
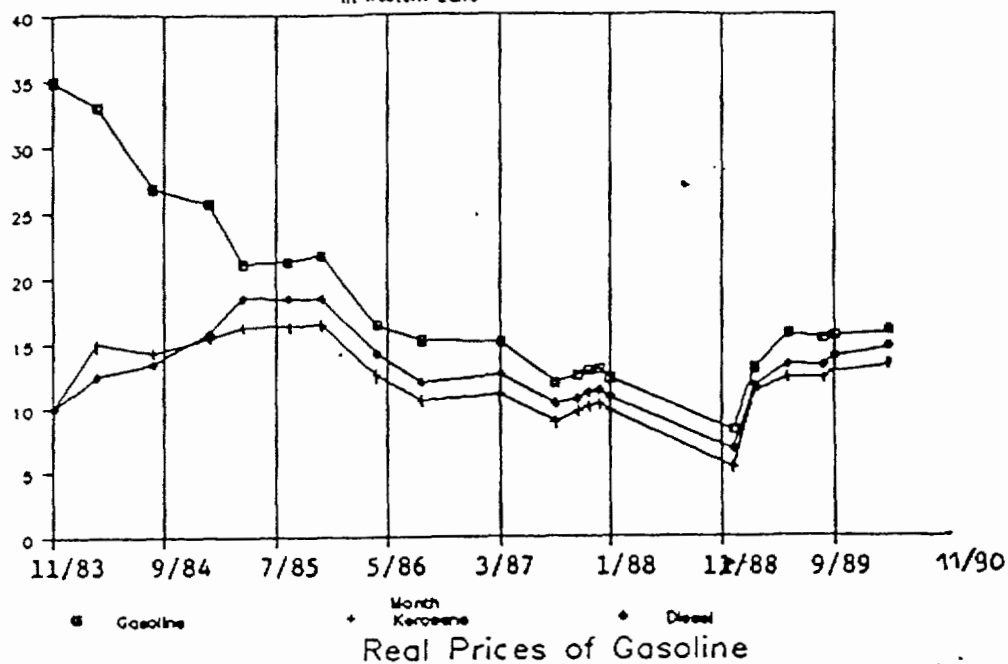
- financial difficulties for the distribution companies;
- a decrease in petroleum product imports and shortages in the interior regions of the country; priority was given to supplying the Kinshasa region which accounts for 55% of sales.
- speculation in the southern and eastern regions of the country, where prices on the parallel market climbed as high as 10 times the official price.

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Table 5.1. Nominal fuel Prices (zaire per liter)

| Z/USD | Date | Gasoline | | | Kerosene | | | Diesel | | |
|-------|--------|----------|-------|---|----------|-------|---|--------|-------|-------|
| | | West | East | | West | East | | West | East | South |
| | Jan-79 | 1.5 | 1.5 | : | NA | NA | : | NA | NA | NA |
| | Sep-79 | 2.5 | 2.5 | : | NA | NA | : | NA | NA | NA |
| | Mar-80 | 4.0 | 4.0 | : | NA | NA | : | NA | NA | NA |
| | Jul-81 | 5.5 | 5.5 | : | NA | NA | : | NA | NA | NA |
| | Dec-82 | 12.5 | 12.5 | : | 3.5 | 3.5 | : | 3.0 | 3.0 | NA |
| 30 | Sep-83 | 35.0 | 35.0 | : | 15.0 | 15.0 | : | 15.5 | 15.5 | NA |
| 30 | Nov-83 | 35.0 | 35.0 | : | 10.0 | 10.0 | : | 10.0 | 10.0 | NA |
| 33 | Mar-84 | 33.0 | 33.0 | : | 15.0 | 15.0 | : | 12.5 | 12.5 | NA |
| 35.5 | Aug-84 | 30.0 | 30.0 | : | 16.0 | 16.0 | : | 15.0 | 15.0 | NA |
| 40 | Jan-85 | 30.0 | 30.0 | : | 18.0 | 18.0 | : | 18.5 | 18.5 | NA |
| 47 | Apr-85 | 25.0 | 30.0 | : | 19.3 | 33.6 | : | 21.9 | 39.2 | NA |
| 52 | Aug-85 | 30.0 | 32.0 | : | 23.0 | 31.0 | : | 26.0 | 31.0 | NA |
| 53 | Nov-85 | 33.0 | 32.0 | : | 25.0 | 33.0 | : | 28.0 | 33.0 | NA |
| 56 | Apr-86 | 30.0 | 32.0 | : | 23.0 | 30.0 | : | 26.0 | 30.0 | 30.0 |
| 60 | Aug-86 | 33.0 | 30.0 | : | 23.0 | 30.0 | : | 26.0 | 30.0 | 30.0 |
| 105 | Mar-87 | 46.0 | 45.0 | : | 33.5 | 45.0 | : | 38.5 | 45.0 | 50.0 |
| 122 | Aug-87 | 51.0 | 49.0 | : | 38.0 | 47.0 | : | 44.0 | 50.0 | 47.0 |
| 126.6 | Oct-87 | 54.0 | 52.0 | : | 42.0 | 50.0 | : | 46.0 | 52.0 | NA |
| 129.3 | Nov-87 | 57.0 | 53.0 | : | 45.0 | 52.0 | : | 49.5 | 55.5 | 50.0 |
| 129.3 | Dec-87 | 59.0 | 55.0 | : | 47.0 | 54.0 | : | 51.5 | 57.0 | NA |
| 129.3 | Jan-88 | 59.0 | 55.0 | : | 47.0 | 54.0 | : | 52.0 | 58.0 | NA |
| 235 | Dec-88 | 73.0 | 100.0 | : | 47.0 | 54.0 | : | 60.0 | 86.0 | 83.0 |
| 335 | Feb-89 | 147.0 | 257.0 | : | 126.0 | 214.0 | : | 131.5 | 254.5 | 249.0 |
| 353.8 | Apr-89 | 156.0 | 282.0 | : | 126.0 | 238.0 | : | 137.0 | 274.5 | 270.0 |
| 353.8 | May-89 | 178.0 | 312.0 | : | 140.0 | 260.0 | : | 151.0 | 302.0 | 290.0 |
| 406 | Aug-89 | 190.0 | 335.0 | : | 152.0 | 277.0 | : | 164.0 | 329.0 | 326.0 |
| 431.4 | Sep-89 | 199.0 | 356.0 | : | 164.0 | 293.0 | : | 178.5 | 347.5 | 346.0 |
| 439.6 | Oct-89 | 202.0 | 362.0 | : | 175.0 | 298.0 | : | 189.0 | 354.0 | 352.0 |
| 463.6 | Dec-89 | 233.0 | 314.0 | : | 207.0 | 296.0 | : | 227.0 | 325.0 | 330.0 |
| 474.8 | Feb-90 | 256.0 | 336.0 | : | 227.0 | 335.0 | : | 246.0 | 354.0 | 344.0 |

Figure 5.2 : Real Prices of Fuel
in Western Zone



Source: Departement de l'Economie National et de Industrie,
Arrete Departemental, various issues and Institut National de
la Statistique, indice Officiel des Prix a la Consommation des
Menages a Kinshasa, various issues.

It should be kept in mind that the financial difficulties of the oil companies were not just the result of the unsuitable pricing structure but also of the government's failure to pay its back debts to the oil companies for products received. As a result, the oil companies were unable to pay their petroleum taxes (ref. ch. taxation).

To check the continual erosion of petroleum product prices, the Conseil Executif introduced a structural price adjustment by announcing two price increases;

- * the first in November 1988: an average of +50%,
- * the second in February 1989: +100% for prices in the west; +300% for prices in the south and east.

These increases were just covered the effects of inflation

5.2 Price and cost analysis of petroleum products

Current selling prices for refined products are made up of three elements which determine the reference price for each route:

- the border entry price or average border price *
- distribution costs
- taxes

The selling price at the pumps is determined by adding a geographical increment to the reference price to compensate for transport costs relative to supplying the various areas.

5.2.1 Average border price

For each of the three supply routes, west, south, and east, the average border price is calculated based on the following:

- the average weighted CIF import price in dollars per ton during the preceding month
- the Zaire/dollar exchange rate estimated for the month in which the price is being set
- bank interest related to the letter of credit, calculated on a 120-day basis at an annual rate of 80.1%.

5.2.2 Distribution costs

The distribution costs combine:

- actual production expenses from the refining process, storage costs, and the marketing costs of the various participants in the distribution system. These costs are assigned according to a distribution scale by product and by region.
- the profit margin of the companies which represents 10% of the average border price.

5.2.3 Adjustment mechanism

In principle, the prices for petroleum products are adjusted monthly according to changes in the parameters on the suggestion of the participants in the distribution system. However, the adoption of the new pricing structure must be authorized by the Département de l'Economie Nationale et de l'Industrie.

5.3 Geographic differential

The geographic differential is an individualized cost which takes into consideration the cost of transport relative to each locality as well as some operating expenses of the ZAIRE SEP's transportation units not covered in the pricing structure. These expenses represent 10% of the total differential.

- all transportation costs are calculated by ZAIRE SEP, which controls all the transport of petroleum products for the distribution companies throughout the country.
- all means of transportation, by water, rail or road, are included in the transportation costs
- ONATRA only handles a small portion of the transport by water which is mainly handled by small private shipping companies and PETROZAIRE and ZAIRE SEP who run a fleet of barges for ZAIRE SHELL. Water transport costs are generally calculated using ONATRA's scale of charges.
- Rail transport is the exclusive domain of the "Société Nationale des Chemins de Fer Zairois (SNCZ)." Official rates are charged.
- Road transport is handled by private companies and by ZAIRE SEP. Rates for private companies are calculated on a ton/kilometre basis. ZAIRE SEP's operating expenses are

covered by the price structure, thus making it almost impossible to discern their actual costs for road transport.

- operating expenses not covered by the price structure are losses due to leakage, which are very high for rail transport (2% for the southern network, 10% for the northern network) and an operating margin.

Short of carrying out an indepth study of all the elements that contribute to the ZAIRE SEP's transport costs, it is difficult to get a clear idea of the actual economic costs.

The calculation of the geographic differential as given by ZAIRE SEP is the sum of all the actual financial costs of the participants. These costs are automatically included in the final retail price.

Annex 5 shows the geographic differentials for February 1990 for the different localities of the country.

5.4 Price structure comparison by origin

5.4.1 Reference price structure

On the basis of the structure established on February 5, 1990 (see annex 3), the price of petroleum products has been broken down for the different import routes (see tables 5.3 and 5.4). Of note is:

- the border prices of products entering the east and south are twice as high as the corresponding western price. This difference is due to the freight cost and to an inexplicable margin on products imported via the south and the east. (see 4.3).
- bank charges (letters of credit, finance charges) are extremely high. They account for 22% of the cost of importing;
- at the price reference level (not including the geographic differential, these differences are reduced by higher pick-up charges raising the cost of distribution for goods arriving through the western route in relation to the eastern southern routes. For this reason, the difference in product prices in these regions is only 30%, 47%, and 40% respectively for gasoline, kerosene, and diesel compared with products in the west.

Taking into account the geographic differential, in other words, the cost of transport to the final destination, the price differences between localities and regions are slightly larger.

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Table 5.3

BREAKDOWN OF PRICES FOR PETROLEUM PRODUCTS ACCORDING TO ORIGIN
/US\$/m³

| Feb. 1990 | Gasoline | | Kerosene | | Diesel | | |
|------------------------|----------|---------|----------|---------|---------|---------|----------|
| | Ex-West | Ex-East | Ex-West | Ex-East | Ex-West | Ex-East | Ex-South |
| Border price (1) | 153,8 | 212 | 182,8 | 230 | 166,9 | 209,8 | 226,1 |
| Transport (2) | - | 160 | - | 160 | - | 160 | 147,5 |
| Total border price | 153,8 | 372 | 182,8 | 390 | 166,9 | 369,8 | 373,6 |
| Bank charges (3) | 36 | 87,1 | 42,8 | 91,3 | 39 | 86,6 | 87,5 |
| Distribution costs (4) | 183,2 | 83,9 | 158,6 | 129,7 | 159,2 | 138 | 111,6 |
| Total | 373 | 542,2 | 384,2 | 611 | 365,1 | 594,4 | 572,7 |
| Parafiscal charges (5) | 166 | 166 | 94,6 | 94,6 | *151,8 | 151,8 | 151,8 |
| Real Reference price | 539 | 708,2 | 478,8 | 705,6 | 516,9 | 746,2 | 724,5 |

(1) Bank charges not included.

(2) Transport from ex-refinery to Zaire border

(3) Bank charges :

- credoc : 13,33% border price

- others : 8,9% (border price + credoc)

(4) SEP, SOZIR and Distributors operating costs.

(5) Customs duty, Excise Tax and Transport Surtax.

Table 5.4
BREAKDOWN OF PRICES ACCORDING TO ORIGIN
(US\$/percent)

| Feb. 1990 | Gasoline | | Kerosene | | Diesel | | |
|----------------------|----------|---------|----------|---------|---------|---------|----------|
| | Ex-West | Ex-East | Ex-West | Ex-East | Ex-West | Ex-East | Ex-South |
| Border price | 28,5 | 29,9 | 38,2 | 32,6 | 32,3 | 28,1 | 31,2 |
| Transport (2) | - | 22,6 | - | 22,7 | - | 21,4 | 20,4 |
| Total border price | 28,5 | 52,5 | 38,2 | 55,3 | 32,3 | 49,5 | 51,6 |
| Bank charges | 6,7 | 12,3 | 8,9 | 12,9 | 7,5 | 11,6 | 12,1 |
| Distribution costs | 34 | 11,7 | 33,1 | 18,4 | 30,8 | 18,5 | 15,4 |
| Total | 62,2 | 76,5 | 80,2 | 86,6 | 70,6 | 79,6 | 79,1 |
| Parafiscal charges | 30,8 | 23,5 | 19,8 | 13,4 | 29,4 | 20,4 | 20,1 |
| Real Reference price | 100,0 | 100,0 | 100,0 | 100,0 | 100,0 | 100,0 | 100,0 |

5.4.2 Retail price structure

Taking into consideration the geographic differential applicable since February 1990, the retail price in the east and the south is 35-50% higher, depending on the product, than in the west (See tables 5.5.a and 5.5.b).

If the official price is compared to the current price on the parallel market, very large price differences are noted for both kerosene and diesel.

The prices of kerosene and diesel in Lubumbashi on the parallel market are 225 and 250 Z/litre compared with the official price of 342 and 361 Z/litre, for a difference of 31 and 34%.

5.5 Comments on the current pricing mechanism

The current price-fixing mechanism has only been working relatively well since November 1988. The range of production costs (financial costs) are now entirely recuperated by the retail price.

However, several factors should be noted:

- the pricing system is controlled; the government reserves the right to refuse price adjustments for political or non-economic reasons. Thus, to limit prices at the pumps, variations in the rate can be deferred (the case for January and March 1990), with a devaluation rate of 10% per month.
- the system does not promote competition; uniform prices are set for consumers,
- thus distribution companies are not encouraged to increase productivity within the sector. Sunk costs should be recovered and not the economic costs through a rationalization of the sector.
- a certain equalization of prices takes place within the system according to product and region (cross subsidy) which does not reflect the actual economic costs of the product:
- SOZIR's transport, storage, and refinery costs are recovered entirely by the prices for goods on the western route; however, the south is also supplied with diesel and gasoline via the western route.
- the companies' profit margins are proportional to the average cost of supplies and not to the earning power of the capital, i.e. the investment capacity.

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Table 5.5.a

CONSUMER PRICE IN KIVU
(Z/11ter)

| | GASOLINE | | | | KEROSENE | | | | DIESEL | | | |
|--------------------------|---------------|-----------|---------------|--------------|---------------|-----------|----------------|--------------|---------------|-----------|-------------------|--------------|
| | Ref. Price | Transport | Total (2) | % (2)/(1) | Ref. Price | Transport | Total | % (2)/(1) | Ref. Price | Transport | Total | % (2)/(1) |
| KINSHASA | 256 (1) | - | 256 | | 227 | - | 227 | | 246 (1) | - | 246 | |
| KIVU (EAST) | | | | | | | | | | | | |
| - BUKAVU | 336 | 8,9 | 344,9 | + 35% | 335 | 8,9 | 343,5 | + 51% | 354 | 8,9 | 362,9 | + 47% |
| - GOMA | 336 | 1,3 | 337,3 | + 32% | 335 | 1,3 | 336,3 | + 48% | 354 | 1,3 | 355,3 | + 44% |
| - KALEMIE (ex - West) | 256 | 119,9 | 375,5 | + 47% | 227 | 119,9 | 346,9 | + 53% | 246 | 119,9 | 365,9 | + 49% |
| Rwanda price | | | 335 (-3 %) | | | | 268 (-22 %) | | | | 322,5 (- 11 %) | |

Table 5.5.b

CONSUMER PRICE IN SHABA
(Z/11ter)

| | GASOLINE | | | | | KEROSENE | | | | | DIESEL | | | |
|--------------------|---------------|-----------|-----------------|--------------|-----|---------------|-----------|-----------------|--------------|-------|---------------|-----------|-----------------|--------------|
| | Ref. Price | Transport | Total (2) | % (2)/(1) | | Ref. Price | Transport | Total | % (2)/(1) | | Ref. Price | Transport | Total | % (2)/(1) |
| SHABA (South | | | | | | | | | | | | | | |
| - KOLWESI | | | | | | | | | | | | | | |
| - ex-west | 256 | 108,7 | 364,7 | + 42% | 227 | 108,7 | 335,7 | + 48% | 246 | 108,7 | 354,7 | + 44% | | |
| - ex-south | - | 32,8 | - | | - | 32,7 | - | | 344 | 32,7 | 367,7 | + 53% | | |
| LUBUMBASHI | | | | | | | | | | | | | | |
| - ex-west | 256 | 115,3 | 371,3 | + 45% | - | 115,3 | 342,3 | + 51% | 246 | 115,3 | 361,3 | + 47% | | |
| - ex-south | - | 16,7 | - | | | | | | | | | | | |
| Black Market Price | | | 360 (-1,5 %) | | | | | 225 (- 34 %) | | | | | 250 (- 31 %) | |

CHAPTER 6

THE PRICE MAXIMA SYSTEM FOR PETROLEUM PRODUCTS

To overcome the inadequacies of the current price structure, the Département de l'Economie Nationale et de l'Industrie has proposed a new pricing system based on the following principles:

- the price of refined products will be determined simply and objectively, taking into account the actual costs.
- the price thus calculated is the price maxima (or ceiling price) which the oil companies are authorized to charge. All companies can offer rebates to their clients in the spirit of competition.

This new pricing system, the introduction of which was initially planned for January 1, 1990, has not yet been implemented.

6.1 Calculation of the price maxima

Calculation of prices in the price maxima system is based on the following principles:

- selling prices are determined annually by the oil companies in relation to the cost factors which make up the formula. The prices are decided upon in collaboration with the government. However, the latter no longer intervenes a priori in fixing the prices but rather retroactively by controlling the profit margin of the companies.
- all the elements which make up the price structure are fixed once and for all in \$US per ton (except the price of imports which changes according to world prices). The costs which make up the basis of the calculation are the "cout optima in real terms of all the participants in the refining, transport, and distribution sectors.
- a single price structure for petroleum products has been established called the reference price, applied uniformly throughout the country. Consequently, the price structure is no longer calculated on the basis of the entry route, west, east or south.
- to the reference price is added a geographic differential to cover the actual costs of transportation to the area served.

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6.2 Components of the retail price maxima

The retail price maxima is composed of four components:

- the entry price or reference border price
- distribution costs
- taxation
- the geographic differential.

A. Border Price

The border price for each product is calculated monthly using an average of the world market quotes for the preceding month. To this is added a fixed increment of \$20 per ton and the sum is then multiplied by a coefficient which takes into account the bank charges.

- the reference quote for the products is Platt's CIF Rotterdam NWE base ARA quotation.
- the fixed increment covers freight costs to the unloading dock in Muanda.
- bank charges cover charges related to opening of lines of credit as well as the cost of transferring in hard currency. The rate charged on credit, imposed by the Central Bank, is 80.1% per year.

B. Distribution costs

Distribution costs have remained in the same bracket as previously. The costs which make up a general base are related to the average of the highest distribution costs during the 1983-1987 period and converted to 1989 costs according to the US consumer price index.

- for ZAIRE SEP expenses: the average value for the 1983-1986 period.
- for the charges and income of companies: the average value in 1985 of oil, diesel and fuel oil and the average value included in the 1989 structures.
- for SOZIR's operating expenses: refining expenses are spread over all the products at an average of \$9.5/ton.

The distribution costs are adjusted at the beginning of each year according to the US consumer price index.

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The following table gives the actual figures calculated for the distribution costs according to product for 1990 in \$US (as reported by the companies).

| Distribution costs : maxima price | | | | |
|-----------------------------------|----------|----------|--------|----------|
| (\$US/m3) | | | | |
| | Gasoline | Kerosene | Diesel | Fuel Oil |
| ZAIRE SEP | 53 | 75 | 77 | 54 |
| Marketing Costs | 111 | 65 | 63 | 51 |
| SOZIR | 10 | 9 | 10 | 9 |
| | <hr/> | <hr/> | <hr/> | <hr/> |
| Total | 174 | 149 | 139 | 114 |

C. Taxation

Taxes, including parafiscal taxes, are fixed according to the budget directives of the government. This aspect will be examined in chapter 7.

D. Geographic differential

Given the standard reference price for all import routes based on the world price, the geographic differential contained in the price maxima system takes all transport costs into account as follows:

- freight costs of imports arriving by the southern and eastern routes to the Zairian border. These costs are contained in the current system in the average border price.
- the distribution transport costs throughout the country as charged by ZAIRE SEP
- an geographic incentive given to the distribution firms to encourage them to supply the interior of the country.

The table in annex 4 gives the values for the new geographic differentials for each locality covered in the price maxima system.

6.3 Comparison of price maxima and current structures

Based on actual figures, comparisons of price maxima and prices calculated according to the structure in place on February 5, 1990 are given below:

| PRICE \$US/m3 | GASOLINE | KEROSENE | DIESEL | FUEL OIL |
|-------------------------|----------|----------|--------|----------|
| Current price structure | 539.2 | 478.0 | 1518.1 | 385 |
| Price maxima | 606.4 | 513.7 | 546.5 | 405.4 |
| Difference | +12.5% | +7.5% | +5.5% | +5% |

As shown, the price maxima would be higher than the corresponding price in the current system: 12.5% for gasoline, 7.5% for kerosene, 5.5% for diesel, and 5% for fuel oil.

6.4 Comments on the price maxima system

The price maxima system is a compromise between a complete freeing of prices as proposed by the World Bank in its Sectorial Adjustment Program and by USAID and the old system of controlled prices which is currently in place. It is nonetheless, in principle, a decisive step towards liberalizing Zaire's oil prices insofar as it addresses the government's and the lending institutions' concern for a longterm rehabilitation of the distribution sector on the one hand and of supplying the market under the most favorable cost and quality conditions for the country on the other.

6.4.1 The principles adopted

The principles adopted by the price maxima system are essential and will affect the operators by:

1. allowing them the complete freedom to fix the prices of petroleum products in relation to such uncontrollable factors as the world market price and the Zaire/dollar exchange rate. Under the proposed system, the government would no longer intervene "a priori" in the retail price adjustment process. Nevertheless, the government would reserve the right to control profit margins retroactively.

2. allowing for the incorporation of changes in cost of the elements that make up the price of refined products in real terms, particularly the distribution and transportation costs.

The effects of the system are analyzed below:

6.4.2 Positive effects

The system should have five positive effects:

1. Rebuilding of the financial situation of the companies

The price freeze during the last few years resulted in a liquidity crisis for the distribution companies. It should be kept in mind that the oil companies wrote off 8 billion Zaires (10% of industry sales in 1987), corresponding to the amount of bad debts owed by the "Caisse de Stabilization". The liberalization of petroleum product prices will, therefore, have the immediate effect of restoring the financial position of companies in the transport and distribution sectors (ZAIRE SEP, oil companies).


2. Revitalizing sales in the interior of the country

The interior of Zaire, especially the east and the south, was hardest hit by the shortages of petroleum products over the last few years. Many gas stations were closed for good, others temporarily, despite storage and distribution capacities and a strong potential demand. Our study of the distribution companies clearly shows that the network sales for such products as gasoline and diesel could increase substantially, particularly in the Shaba region which could represent a volume increase of approximately 3-4,000 m3 of products.

3. Rebuilding of working stocks

On average, the working stocks of the distribution companies are equivalent to 10-15 days of consumption, a level that is insufficient to ensure a regular supply to the eastern and southern regions of the country. With present delays of supplies by the various import routes (average 45 days), it is extremely important to rebuild stocks up to the equivalent of 45 days of consumption.

This objective, only attainable if the participants are in a strong financial situation, is essential to ensuring a constant supply to these regions and avoiding shortages.



4. Reducing the size of the parallel market

Petroleum product shortages in the Shaba and Kivu regions have led to the creation of a parallel market in these regions, where the prices have reached as high as 10 times the official price.

This market would be reduced by regular supplies of diesel, oil, and gasoline.

Nevertheless the parallel market will not completely disappear, especially in the eastern region of the country given the differences between prices in the interior of the country and those in the neighboring countries.

5. Increased competition

The price maxima system allows the distribution companies to give rebates for wholesale as well as retail sales. A measure of competition would be introduced among the companies in their attempt to boost sales, particularly in the south.

The system should therefore benefit the consumer not only in the area of prices but also through a better quality service.

The price maxima system should be considered as an intermediate step towards a total freeing of oil prices. It does not represent, in the short term at least, an efficient system of price economics allowing real competition among the various operators.

A certain number of structural and circumstantial factors could block the expected positive effects of the price maxima system.

6.4.3 Limits of the system

1. The presence of cartels

Zaire's distribution market suffers from too many cartels; four companies dominate: PETROZAIRE, FINA, MOBIL, SHELL. The recent entry of small operators in the south of the country (ZAIRE OIL, MADOVA, and since February 1990 LUBANJI, and YOSHAD) is limited to supplying bulk to a few large consumers, particularly Gecamines. The small companies do not have a retail distribution network and almost no fixed costs.

Moreover, the operating methods of these companies aren't always in keeping with the criteria for free competition as touted by the authorities. These companies work mainly for reserved markets (especially GECAMINES). In less than one year ZAIRE SHELL supplied almost 25% of GECAMINES diesel requirements.

2 Rebuilding the distribution sector

The distribution sector for petroleum products in Zaire was a financially devastated in 1989. For the effects of real competition to be felt, three conditions must be fulfilled:

- the financial recovery of the sector must be completed, which means the rebuilding the financial base of the companies. This condition refers especially to the delayed payments of the government and parastatal companies: GECAMINES, SNCZ, ONATRA, Office des routes. At the moment, given the financial difficulties of these companies, the payment delays have had a tendency to rise appreciably (more than 120 days).
- the buildup of working stocks of the companies is essential to provide a constant supply to the market. This is of course linked to the rebuilding of the companies' financial base.
- the stockpiling of 30 extra days of supplies would represent a capital expenditure of 9 billion Zaires for the industry with an annual financial cost of approximately 560 million Zaires at a rate of 50% per year.
- One of the major constraints in the oil industry will be re-supplying markets in the interior of the country, particularly in the east and the south. Under these conditions, there can be little hope for lower retail prices in the immediate future until the financial base of the companies has been restored. A price war under present financial conditions would put these companies out of business in a very short time.

3. Availability of hard currency

The system cannot function properly unless there is enough hard currency to buy imported products. The current foreign exchange quota for the oil sector hinders the proper functioning of the distribution sector. Financing programs for the importation of petroleum products by the World Bank (\$75 million) and by USAID (\$30 million) will alleviate this problem in the short term.

4. Cost of transport infrastructures

Rehabilitation projects in the transport sector, particularly for ONATRA and SNCZ, will involve substantial investments. The economic and financial profitability of these projects as calculated by the World Bank involves raising the tariffs of these companies. The tariffs are collected for ZAIRE SEP which handles all the transport of petroleum products in the country.

CHAPTER 7

TAXATION

7.1 Evolution of petroleum taxes

Up until December 1988, fiscal petroleum taxes were calculated on an ad valorem basis on the average price of petroleum product imports for each import route, west, east, and south. As previously discussed (see chapter 5), the practice of fixing prices led to a bizarre situation where two official prices existed for the same product in the same locality. This was particularly true in the south which can be supplied either from the west or from the south. The average real cost of importation via the eastern and southern routes is twice as high as that of importing via the west.

To lessen the impact of these differences on the retail price in the eastern and southern regions, the government introduced a negative tax, in the interest of balancing prices, which amounted to a subsidy on products in these regions. This policy had two consequences:

- fraudulent re-exportation of products to the neighboring countries in the east and in the south where retail prices were higher,
- exacerbation of the shortages in these regions.

This situation was corrected in the February 1989 pricing structure. Subsidies were cut off for products imported via the east and the south. The tax basis was standardized for all import routes, in relation to a fixed rate calculated on the actual average price of imports. This new formula considerably raised the fiscal taxes for products imported via the east and the south as shown in the table below:

Evolution of taxes within the pricing structure (Z/m3)

Parafiscal charges:

- 1) Dec 3, 1988
- 2) Feb 1, 1989
- 3) March, 1990

| | Gasoline | | Kerosene | | Diesel | | | Fuel Oil |
|-----------|----------|--------|----------|--------|--------|---------|---------|----------|
| | West | East | West | East | West | East | South | East |
| 1) 21143 | | 0 | 9370 | (7418) | 14853 | (12800) | (16100) | 782 |
| 2) 40343 | | 96398 | 21747 | 44986 | 36173 | 83545 | 83545 | 25477 |
| 3) 112718 | | 112718 | 57799 | 57799 | 101523 | 101523 | 101523 | 67330 |

7.2 Role of taxation in the price structure

Despite tax rate increases for petroleum products, taxes are still relatively low (35% in March 1990) compared to certain African countries where taxes represent 50-60% of the retail price. A tax increase could, therefore, be forthcoming. It should be noted, however, that distribution and transport costs are twice as high in Zaire compared to those in these same countries. Short of raising the retail price, there could only be a tax increase if major improvements in productivity in the distribution and transport sectors were made.

ROLE OF TAXATION IN THE PRICE STRUCTURE (WESTERN ROUTE) :

| % of price | Dec. 1988 | Feb. 1989 | Feb. 1990 | March 1990 |
|---------------|-----------|-----------|-----------|------------|
| Gasoline | 29.0% | 27.5% | 31.0% | 37.9% |
| Kerosene | 20.0% | 17.0% | 19.5% | 23.5% |
| Diesel | 25.0% | 27.5% | 29.0% | 35.2% |
| Fuel Oil | 4.0% | 27.5% | 26.0% | 32.4% |
| Total average | 23.5% | 27.0% | 28.5% | 34.8% |

7.3 Calculation of the tax basis

The pricing structure contains two categories of taxes depending on their allocation:

A. Direct taxes which go to the Tresor Public. These include:

- an import duty
- an excise tax

B. Parafiscal taxes destined for the transport agencies such as the Office des Routes, the Service National des Routes de Déserte Agricoles, and the Regie des Voies Fluviales.

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7.3.1 Former situation

Until December 1989, fiscal taxes were calculated in proportion to the average border price (average import cost of petroleum products) according to a fixed rate:

- import duty and excise tax: 10%
- transportation surtax: 55%, 15%, 45%, and 45% respectively for gasoline, kerosene, diesel, and fuel oil.

This method of calculating prices had two major drawbacks:

- it amplified and projected international price variations onto internal prices;
- tax revenues varied according to international market price fluctuations.

To eliminate these drawbacks, the IMF recommended isolating the calculation of the tax basis from the international market and from foreign exchange to local money.

7.3.2 Current Situation

The calculation of taxes has been simplified as of 1990 and takes into account the following parameters and principles:

- fiscal taxes are uniformly applied no matter the source of the import
- the basic value for a product is a fixed reference value calculated once and for all on the average world price of petroleum products during 1979-1988. This value can be put on a market price list.
- the reference value is given in \$US per metric ton. In this way it is isolated from the fluctuation of the Zairians currency. The reference values are: gasoline \$264/T, kerosene \$266/T, diesel \$241/T, fuel oil \$137 (see annex 5).

- fiscal taxes are based on the reference value multiplied by an adjustment coefficient which varies depending on the product.
The rates are: 0.85% for gasoline, 45% for kerosene, 75% for diesel and fuel oil (see table 7.1). The adjustment coefficients are stipulated in the finance regulations (eventually by ordinance) in relation to the tax revenue needs of the government.
In March 1990, although the weighted coefficients had not been modified, fiscal taxes were raised by 35% for gasoline; 22% for oil and 33% for diesel and fuel oil (see table 7.1.b and annex 6).

7.4 Collection of petroleum taxes

In the old system up to 1988, petroleum taxes allocated to the Tresor Public were collected by OFIDA as the products entered the internal market, while taxes destined for the transportation agencies were remitted directly by the oil companies after the sale of the products to consumers.

This procedure never worked properly due to the financial difficulties experienced by the distribution companies in 1987 and 1988 and caused large disturbances in the operation of the transportation agencies.

To rectify the situation, the tax authorities decided that as of February 1, 1989, all petroleum taxes would be levied by OFIDA at the time of importation, in other words:

- at the border for imported products,
- as the products left the refinery for products sold by SOZIR.

This stipulation which in essence asked the oil companies to pre-finance the tax revenues did not work. Given their financial situation, the companies could not absorb these costs because of the delays in payment by the government and the parastatal companies (120 days).

An agreement was then reached between the tax department and the industry whereby taxes would be remitted 90 days after the entry date of the product; the delay to be shortened to 60 days as of April 1, 1990.

The government agreed to pay for its consumption within 90 days of the billing date which actually represents 120 days given the administrative channels to be followed. These commitments have not been upheld; table 7.2 shows the arrears of the government and of the oil companies as of February 1990.

TABLE 7.1.a
Evolution of the Fiscal Structure

| Fuel Price December 1988 | | Fuel Price February 1989 | | Fuel Price February 1990 Fix price in US\$ | |
|-----------------------------|----------|--|--|--|--|
| Excise tax | fix base | Excise tax (10% Import cost) | | Excise tax 15% | |
| Consumption tax | fix base | Duty costumes (10% Import cost) | | Duty costumes 15% | |
| Unique tax | fix base | | | | |
| Stabilization Fund | fix base | Stabilization Fund 0 % | | Stabilization 0% | |
| Road Tax | fix base | Transport Surtax | | Transport Surtax | |
| Rivers Tax | fix base | . Gasoline 55% . Kerosene 15% Import cost . Diesel 45% . Fuel oil 45% | | . Gasoline 55% . Kerosene 15% . Diesel 45% . Fuel Oil 45% | |
| Local interest Road Tax | fix base | | | | |
| Special Treasury Fund | fix base | | | | |

Table 7.1.b
Comparison of fiscal taxes February/March 1990

| US\$/m3 | Gasoline | Kerosene | Diesel | Fuel Oil |
|-----------------------------|----------|----------|--------|----------|
| Fiscal base | 195,46 | 210,14 | 202,4 | 134,3 |
| Current rate | 0,85 | 0,45 | 0,75 | 0,75 |
| Fiscal tax February 1990 | 166,0 | 94,6 | 151,8 | 100,7 |
| March 1990 increase | +56,6 | +20,6 | +50,5 | +33,5 |
| Fiscal tax March 1990 | 224,6 | 115,2 | 202,3 | 134,2 |
| Increase | 35 % | 22 % | 33 % | 33 % |

TABLE 7.2
BALANCE OF PAYMENT ARREARS IN FEBRUARY 1990
BETWEEN THE GOVERNMENT AND OIL COMPANIES

1. Government debt (Z millions) :

| | Debt due | Payment | Net due |
|------------------|---------------|----------|----------|
| November 1989 | 1623,5 | - | 1623,5 |
| December 1989 | 1701,8 | 2000 | 1325,3 |
| January 1990 | 1798,6 | 1433,7 | 1690,2 |
| February 1990 | 1819,3 | - | 3509,5 |
| Current invoices | <u>1831,1</u> | <u>-</u> | <u>-</u> |
| Net due 120 days | 8774,3 | 3433,7 | 5340,6 |

* Debt due for one month corresponds to consumption for the Administration 135 days ago.

2. Oil Company debts (Z millions)

| | Debt | Payment | Net due |
|-----------------------|-------------|---------------|-----------------|
| Balance Jan 1990 | 290 | - | 290 |
| February 1990 | <u>4534</u> | <u>709</u> | <u>-</u> |
| Total due | 4824 | 709 | 4115 |
| Due by Administration | <u>-</u> | <u>1819,3</u> | <u>- 1819,3</u> |
| Net due 90 days | 4828 | 2528,3 | 2295,7 |
| Net due 120 days | 8774,3 | 3433,7 | 5340,6 |

Upon receipt of tax payments from the companies, OFIDA is to pass on the taxes to the various beneficiaries within 15 to 30 days as shown below:

- 44.0% to the Tresor Public
- 43.0% Office des Routes
- 6.0% Service National des Routes de Déserte Agricoles
- 4.0% Regie des Voies Fluviales
- 1.5% Comité Nationale de l'Energie
- 0.54% Office Zairois de Controle
- 0.06% Comité de Répartition
- 0.60% Cellule d'Etudes et de Planification Industrielle
- 0.30% Office des Douanes et Accises

Current distribution rates will likely be modified with the arrival of another beneficiary: Offices des Voies et Drainages

7.5 Tax revenue projections

On the basis of demand projections (see 3.5), two scenarios for calculating tax revenue projections have been followed. The first presupposes a rebuilding of working stocks, the second does not.

The average level of oil tax revenues for 1990 and 1991 is

\$141.2 and \$142.2 million respectively for the first scenario (see table 7.3)

\$135.6 and \$136.6 million for the second (see table 7.4).

Scenario 1 shows slightly higher revenues (+4%) compared to some government estimates. These estimates are calculated on the volume of sales for 1990 as equivalent to that of the previous year; not including the reguilding of working stocks. This volume is the one used in scenario 2.

With the current rates of distribution of tax revenues, estimates of revenues allocated to the Tresor Public and to the various transport agencies have been calculated (see table 7.5 and 7.6).

These figures show that the projected revenues paid to

- the Office des Routes (O.R.),
- the Service National des Routes de Déserte Agricoles (SNRDA),
- the Régie des Voies fluviales (RVF)

in 1990 these figures will be approximately

\$60.7 - \$8.7 - \$5.6 million for the scenario including a rebuilding of stocks.

\$58.3 - \$8.1 - \$5.4 million for the scenario without a rebuilding of stocks.

Revenues are calculated on a full fiscal year based on figures up to March 1990.

To calculate the real flow of revenues, the delays in collecting taxes (3 months) as well as the rates previous to March 1990 must be taken into account.

Calculated in this manner, total tax revenues in 1990 will be \$123 million of which \$53 million will be allocated to the Office des Routes at current allocation rates.

Revenue projections are calculated annually using the current allocation coefficients: These coefficients will be modified in the near future with the arrival of a new beneficiary, the Office des Voies et Drainages.

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Table 7.3 :

TAX REVENUES : 1990-1995 PROJECTION.

(Stocks included, US \$ million)

| 1990 | GASOLINE | KEROSENE | DIESEL | FUEL OIL | TOTAL |
|------------------|----------|----------|--------|----------|---------|
| ---- | | | | | \$ mio. |
| Tax rate \$us/m3 | 224.2 | 115.2 | 202.3 | 134.2 | |
| Consumpt. M3 | 175.1 | 37.8 | 448.3 | 51.8 | |
| TAX REVENUE | 39.2 | 4.4 | 90.7 | 6.9 | 141.2 |
| 1991 | | | | | |
| ---- | | | | | |
| Tax rate \$us/m3 | 224.2 | 115.2 | 202.3 | 134.2 | |
| Consumpt. M3 | 175.8 | 37.8 | 452.9 | 50.7 | |
| TAX REVENUE | 39.4 | 4.4 | 91.6 | 6.8 | 142.2 |
| 1992 | | | | | |
| ---- | | | | | |
| Tax rate \$us/m3 | 224.2 | 115.2 | 202.3 | 134.2 | |
| Consumpt. M3 | 170.1 | 36.3 | 443.9 | 47.6 | |
| TAX REVENUE | 38.1 | 4.2 | 89.8 | 6.4 | 138.5 |
| 1993 | | | | | |
| ---- | | | | | |
| Tax rate \$us/m3 | 224.2 | 115.2 | 202.3 | 134.2 | |
| Consumpt. M3 | 171.3 | 36.3 | 452.2 | 46.6 | |
| TAX REVENUE | 38.4 | 4.2 | 91.5 | 6.3 | 140.3 |
| 1994 | | | | | |
| ---- | | | | | |
| Tax rate \$us/m3 | 224.2 | 115.2 | 202.3 | 134.2 | |
| Consumpt. M3 | 172.5 | 36.3 | 460.8 | 45.7 | |
| TAX REVENUE | 38.7 | 4.2 | 93.2 | 6.1 | 142.2 |
| 1995 | | | | | |
| ---- | | | | | |
| Tax rate \$us/m3 | 224.2 | 115.2 | 202.3 | 134.2 | |
| Consumpt. M3 | 173.7 | 36.3 | 470.0 | 44.8 | |
| TAX REVENUE | 38.9 | 4.2 | 95.1 | 6.0 | 144.2 |

Table.7.4 :

TAX REVENUES : 1990-1995 PROJECTIONS

(Stocks not included , \$ US Million)

| 1990 ---- | GASOLINE | KEROSENE | DIESEL | FUEL OIL | TOTAL \$ mio. |
|------------------|----------|----------|--------|----------|------------------|
| Tax rate \$us/m3 | 224.2 | 115.2 | 202.3 | 134.2 | |
| Consumpt. M3 | 168.1 | 36.3 | 430.3 | 49.7 | |
| TAX REVENUE | 37.7 | 4.2 | 87.1 | 6.7 | 135.6 |
| 1991 ---- | | | | | |
| Tax rate \$us/m3 | 224.2 | 115.2 | 202.3 | 134.2 | |
| Consumpt. M3 | 168.7 | 36.3 | 434.8 | 48.7 | |
| TAX REVENUE | 37.8 | 4.2 | 88.0 | 6.7 | 136.6 |
| 1992 ---- | | | | | |
| Tax rate \$us/m3 | 224.2 | 115.2 | 202.3 | 134.2 | |
| Consumpt. M3 | 168.7 | 36.3 | 442.9 | 47.7 | |
| TAX REVENUE | 37.8 | 4.2 | 89.6 | 6.5 | 138.1 |
| 1993 ---- | | | | | |
| Tax rate \$us/m3 | 224.2 | 115.2 | 202.3 | 134.2 | |
| Consumpt. M3 | 171.1 | 36.3 | 451.2 | 46.8 | |
| TAX REVENUE | 38.4 | 4.2 | 91.3 | 6.4 | 140.2 |
| 1994 ---- | | | | | |
| Tax rate \$us/m3 | 224.2 | 115.2 | 202.3 | 134.2 | |
| Consumpt. M3 | 172.3 | 36.3 | 459.7 | 45.8 | |
| TAX REVENUE | 38.6 | 4.2 | 93.0 | 6.3 | 142.1 |
| 1995 ---- | | | | | |
| Tax rate \$us/m3 | 224.2 | 115.2 | 202.3 | 134.2 | |
| Consumpt. M3 | 173.5 | 36.3 | 468.8 | 44.9 | |
| TAX REVENUE | 38.9 | 4.2 | 94.8 | 6.2 | 144.1 |

Table.7.5 : TAX REVENUES : 1990-1995 PROJECTIONS
(stocks included)

(1990 \$ US Million)

| | TAX REVENUE | TRESOR PUBLIC | OFFICE S N D R A ROUTES | R V F | OTHERS | |
|------|----------------|------------------|----------------------------|-------|--------|-----|
| | | 44 | 43 | 6 | 4 | 3 |
| 1990 | 141.2 | 62.1 | 60.7 | 8.5 | 5.6 | 4.2 |
| 1991 | 142.2 | 62.6 | 61.1 | 8.5 | 5.7 | 4.3 |
| 1992 | 138.5 | 60.9 | 59.6 | 8.3 | 5.5 | 4.2 |
| 1993 | 140.3 | 61.7 | 60.3 | 8.4 | 5.6 | 4.2 |
| 1994 | 142.2 | 62.6 | 61.1 | 8.5 | 5.7 | 4.3 |
| 1995 | 144.2 | 63.5 | 62.0 | 8.7 | 5.8 | 4.3 |

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Table.7.6 : TAX REVENUES : 1990-1995 PROJECTIONS
(stocks not included)
(1990 \$ US Millions)

| | TAX REVENUE | TRESOR PUBLIC | OFFICE S N D R A ROUTES | R V F | OTHERS | |
|------|----------------|------------------|----------------------------|-------|--------|-----|
| | | 44 | 43 | 6 | 4 | 3 |
| 1990 | 135.6 | 59.7 | 58.3 | 8.1 | 5.4 | 4.1 |
| 1991 | 136.6 | 60.1 | 58.8 | 8.2 | 5.5 | 4.1 |
| 1992 | 138.1 | 60.8 | 59.4 | 8.3 | 5.5 | 4.1 |
| 1993 | 140.2 | 61.7 | 60.3 | 8.4 | 5.6 | 4.2 |
| 1994 | 142.1 | 62.5 | 61.1 | 8.5 | 5.7 | 4.3 |
| 1995 | 144.1 | 63.4 | 62.0 | 8.6 | 5.8 | 4.3 |

CHAPTER 8

RECOMENDATIONS FOR THE IMPLEMENTATION OF PAADD

The Energy Sectorial Adjustment program, to be implemented by the government, has two main objectives:

- to supply the internal market at the lowest possible cost of the country as a whole.
- to effect the payment of the parafiscal petroleum taxes to the transportation agencies responsible for the management and maintenance of the transportation infrastructure.

In order to meet these objectives, several steps must be taken to eliminate the obstacles that remain throughout the distribution sector on the one hand and to ensure that the transportation agencies receive their tax revenues on the other.

Therefore, the disbursements from the CIP program (see annex 7) should be contingent upon the fulfillment of certain prerequisites in the fuel and particularly in the transportation sector.

These prerequisites can be divided into major and minor categories. The major conditions are essential if the objectives set out by USAID are to be met. The minor conditions, on the other hand, will not jeopardize the project if they remain unfilled. They would nevertheless contribute to the efficiency of the program.

8.1. Prerequisites for the fuel sector

8.1.1 Major conditions

A. Liberalization of oil prices.

The implementation of the price maxima system is essential to rebuilding the distribution sector and constitutes an intermediate step towards freeing product prices. Priorities include:

- the implementation of the price maxima system (which is not currently in place) to eliminate the practice of uniformly applying prices to petroleum products and to replace it with a retroactive control on the profit margins of the companies.

- the setting up of a timetable which fixes the dates for the liberalization of prices. The World Bank, which agrees to the implementation of the price maxima system recommends that the time frame for this phase not exceed 4 to 6 months.

It should be noted the the price maxima system can replace a completely liberalized system over the medium term insofar as it takes into account the actual costs of importation and distribution.

These distribution costs are adjusted annually based on \$/ton, according to the US consumer price index.

B. Lifting of import restrictions on petroleum products

At the present time, calls for tenders for the importation of petroleum products via the western route are limited to member countries of the Communauté Economique des Etats de l'Afrique Centrale (CEEAC).

This situation does not allow for optimum buying and financing conditions of import products (see chapter 4).

One of the prerequisites of USAID's import finance program should be that competitive bids be opened up to all supplier members of the World Bank and that the supplying of the market be carried out under the optimal conditions for cost and supply delays.

It should be noted, however, that current imports entering via the south and the east are carried out exclusively for the oil companies.

C. The Comité d'achat

The Comité d'achat, responsible for the coordination of imports and the managing of contracts, must modify its operating procedures.

The Comité d'achat must become completely independent of the state-owned PETROZAIRE. To this end:

- distribution companies must have a real say in the Comité d'achat. The dominant role of PETROZAIRE must be curtailed and the government-owned company placed on equal footing with the other participants.
- PETROZAIRE must not take over the Comité d'achat's role of sending out international calls for tender and of signing petroleum product contracts (as in the case of the Elf-Aquitaine contract).

8.1.2 Minor prerequisites

A) Liberalization of the internal market distribution.

Several steps should be taken by the authorities in order to ensure a better supply to the interior of the country, particularly to remote areas not covered by the distribution companies:

- legalizing the resale of products by small merchants, subject to certain regulations,
- reducing the required minimum purchase of 5 barrels to 1 barrel for small merchants

B) Operating procedures for Zaire-Oleoduc

Distribution companies must be allowed to participate in the proposed company Zaire-Oleoduc, whose role will be to manage the planned Muanda-Matadi pipeline.

A preliminary agreement between the Conseil Executif and the oil industry concerning this matter has already been signed.

C) Sectorial studies

Zaire's fuel sector is poorly understood due to the lack of studies or sectorial analyses. The following studies are recommended:

1. A study of distribution and transportation costs

Distribution and transportation costs contained in the oil pricing structure are very high compared with other African countries and there is possibly a potential for an increase in productivity in this area. An indepth study of these costs in relation to the rehabilitation programs for the sector (currently being negotiated) would reveal the relevant factors.

2. A study of fuel consumption

No reliable statistics are currently available on oil consumption based on the branch of industry and the region. Consequently, it is almost impossible to make accurate demand predictions or to calculate the demand potential according to the branch of industry in order to measure the effects of price fluctuations on regional and national consumption. This last point is especially important given the nominal change of prices in Zaire.

Furthermore, these studies would measure the effect of USAID's program for financing petroleum product imports on the different socio-professional levels of society, particularly on low and middle-income households.

Such a study should, therefore, gather statistics according to the demand in specific sectors (transportation, industry, mining, energy), as well as region and income level.

8.2 Prerequisites for the transportation sector

8.2.1 Major conditions

- A) Honoring of the terms of payment for the parafiscal tax.

The strict honoring of the terms of payment for the petroleum tax by the distribution companies to OFIDA is imperative to the proper functioning of the transportation agencies.

- Government expenditures on fuel must be paid within 90 days of the delivery date, actually 120 days given the administrative channels to be followed for the clearing of bills (approximately 30 days). It should be noted that administrative delays could be eliminated completely if a monthly disbursement system were introduced.
- Consumption by parastatal companies must be paid within 90 days of the delivery date.
- Delays in the payment of taxes by the oil companies to OFIDA, the central collection agency for tax on crude oil, must be reduced from 90 days to 60 days from the date the product was at their disposal. The distribution companies have agreed to honor this delay if, in turn, the government honors its 90-day payment commitment.

B) Remittance of taxes by OFIDA to the transportation agencies

OFIDA must redistribute the oil taxes to the transportation agencies (Office des Routes, Regie des Voies Fluviales, and the Service National pour les Routes de Desserte Agricoles) within 15 days of receipt of payment from the distribution companies. In general, the OFIDA's current payment delay is approximately 15-30 days. Of course, these delays can only be respected if the terms of payment for government and parastatal consumption are respected as well.

C) Payment procedures for government consumption

To avoid delays in payments for government consumption, the Budget Department must set up a special budget procedure:

- by making the consumption of fuel a priority expenditure, on the same level as the salaries of civil servants;
- by instituting a rapid payment disbursement system, on a monthly basis for example with a regulation of invoices every quarter.
- by giving priority to allocations of petroleum taxes collected by OFIDA to transportation agencies in case of default by the government on its payments for 30 consecutive days (see annex 8).

These procedures could easily be put into place without interrupting the management procedures of the country's Public Finance Department. This same system was instituted in the Ivory Coast for the government consumption of electricity, water, and for use of the telephone system.

8.2.2 Minor prerequisites

A) Public consumption

The government's consumption of all types of petroleum products accounts for a large part of the country's total consumption. Procedures for allowing competitive bids should be set up for petroleum supply contracts for the various ministries and public companies. The World Bank applies this principle for quantities greater than 100 m³/month. With a free market-style system for petroleum products, a procedure for competitive bids would allow the government to benefit from rebates on its supplies.

B) Paying of arrears

The current situation of arrears between the government, the parastatal companies, and the participants in the distribution system must be resolved and a timetable set up for the paying of arrears.

Conclusion: Given the current situation in Zaire's petroleum distribution sector and the objectives of PAAD, a set of major prerequisites must be met. If these conditions are not fulfilled, the objectives set up by PAAD will be severely compromised.

Annex 1

MAIN LEGAL TEXTS CONCERNING THE DISTRIBUTION SECTOR

1. Ordinance no. 81-004 dated February 14, 1981 concerns the regulations for importing and exporting hydrocarbons and their derivatives.
2. Ordinance no 81-021 dated February 14, 1981 complements the law no. 78-004 dated January 20, 1978 relating to the creation and the statutes of the public company named "Entreprise Petrolière du Zaïre" (PETROZAIRE) and provides means of implementing the ordinance law no. 81-004 dated February 14, 1981 relative to the regulations for importing and exporting hydrocarbons and their derivatives.
3. Ordinance no. 84-145 dated July 2, 1984 surrenders the government's participation in the fuel distribution companies to PETROZAIRE.
4. Letter from the Gouverneur of the Banque du Zaïre no. 6417 dated June 5, 1985 relates to the lifting of import restrictions on petroleum products.
5. Letter no.1304/CAB.MINER/85 dated August 10, 1985 relates to the liberalization of imports and of the petroleum product market.
6. Letter no. 1622/CAB.MINER/85 dated November 30, 1985 relates to the creation of a "supply" department at ZAIRE SEP.
7. Letter no. 82/Dép. Portefeuille/86 dated January 30, 1986 relates to the management of the government's portion in the petroleum distribution companies.
8. Circular no. 31/BCAB.MINER/86 relates to the organization of calls for tender and the management of petroleum product supply contracts under a liberalized system.
9. Circular no. 1029/CAB.MINER/87 dated August 21, 1987 relates to the organization of calls for tender and the management of petroleum product supply contracts under a liberalized system.
10. Circular no. 929/CAB.MINER/88 modifies and complements the circular no. 1029/CAB.MINER/87 dated August 21, 1987 relating to the organization of calls for tender and the management of petroleum product supply contracts under a liberalized system.
11. Departmental order no. 52/CAB.MINER/88 dated April 6, 1989 relates to the institution of the Commission de verification des prix à l'importation des produits pétroliers (Commission for the verification of the import price of petroleum products).

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Différentiels géographiques appliqués à partir de Février 1990.

| (01) | Dépôts S.E.P. | Février 1990 |
|------|---------------|--------------|
| O | AKULA | 30,3 |
| O | ANGO-ANGO | - |
| O | BANDUNDU | 14,0 |
| O | BENA-DIBELE | 39,7 |
| O | BOLENGE | 18,7 |
| O | BOMA | - |
| E | BUKAVU | 8,9 |
| O | BUMBA | 32,7 |
| O | BUNIA | 170,0 |
| E | BUNIA | 9,9 |
| O | BUSINGA | 51,4 |
| E | BENI | 1,3 |
| E | GOMA | 1,3 |
| O | ILEBO | 28,0 |
| O | ISIRO | 84,2 |
| O | INONGO | 28,0 |
| O | KALEMIE | 119,9 |
| E | KALUNDU | - |
| O | KALUNDU | 135,0 |
| O | KANANGA | 59,8 |
| O | KINSHASA | - |
| O | KIKWIT | 30,3 |
| O | KISANGANI | 42,0 |
| O | KOLWEZI | 108,7 |
| S | KOLWEZI | 32,8 |
| O | LIKASI | 109,1 |
| S | LIKASI | 23,5 |
| O | LUKALA | - |
| O | LUBUMBASHI | 115,3 |
| S | LUBUMBASHI | 16,7 |
| O | MOANDA | - |
| O | MUNGBERE | 90,8 |
| O | MWENE-DITU | 72,3. |

(1) Vole d'importation : O= Ouest ; E= Est ; S= Sud

STRUCTURE DE PRIX OUEST / EST / SUD au 05/02/1990.

Taux = 474,80 Z pour 1 dollar

| | ESS ENCE | | PETROLE | | GASOIL | | | FOUET | GAZ |
|--|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| | Ouest | Est | Ouest | Est | Ouest | Est | Sud | Ouest | Ouest |
| VOLUME : Total=60.190 m3 | 10750 m3 | 800 m3 | 3000 m3 | 300 m3 | 32500m3 | 2800 m3 | 5000 m3 | 5000 m3 | 40 T |
| 1.P.M.F. | 82732,62 | 200178,42 | 98354,08 | 209864,69 | 89818,52 | 198994,77 | 201039,61 | 71719,91 | 215245,83 |
| 2.Frais allegement transport & stock SOZIR: | 4396,00 | 0,00 | 4396,00 | 0,00 | 4396,00 | 0,00 | 0,00 | 4396,00 | 4396,00 |
| 3.Frais bancaires (8,9% du PMF) | 7363,20 | 17815,20 | 8753,51 | 18677,96 | 7993,85 | 17710,53 | 17892,53 | 6383,07 | 19156,88 |
| 4.Total P.M.G.D. | 94491,82 | 217994,52 | 111503,59 | 228542,64 | 102208,37 | 216705,31 | 218932,13 | 82498,98 | 238778,71 |
| 5.Caisse de stabilisation | 0,00 | 0,00 | 0,00 | 0,00 | 0,00 | 0,00 | 0,00 | 0,00 | 0,00 |
| 6.Perte MEP (1% PMGD pour essence et 0,5% pour autres produits) | 944,92 | 2179,95 | 557,52 | 1142,71 | 511,04 | 1083,53 | 1094,66 | 412,49 | 1193,99 |
| 7.Charges d'exploitation S.E.P. | 24977,53 | 6709,96 | 36787,71 | 14264,36 | 37636,48 | 28229,53 | 15987,92 | 23458,84 | 27459,89 |
| 8.Charges d'exploitation Societe Commerc. | 42524,24 | 8742,46 | 17736,41 | 23313,59 | 18152,66 | 14529,94 | 14015,04 | 15762,44 | 103034,20 |
| 9.Charges d'exploitation SOZIR | 4684,86 | 0,00 | 4684,86 | 0,00 | 4684,86 | 0,00 | 0,00 | 4684,86 | 4634,86 |
| 10.Marge Societes Commerciales (10% PMGD) | 9449,18 | 21799,45 | 11150,36 | 22854,26 | 10220,84 | 21670,53 | 21893,21 | 8249,90 | 23879,87 |
| 11.Total frais de distribution | 82580,72 | 39431,82 | 70916,35 | 61574,92 | 71205,88 | 65513,52 | 52990,83 | 52568,54 | 160252,81 |
| 12.FMF fiscal (en Z/m3) | 92756,93 | 92756,93 | 99774,47 | 99774,47 | 96118,51 | 96118,51 | 96118,51 | 63746,65 | 215245,83 |
| 13.Taux de taxation (en %) | 0,85 | 0,85 | 0,45 | 0,45 | 0,75 | 0,75 | 0,75 | 0,75 | 0,75 |
| 14.Total Parafiscalites | 73843,39 | 78843,39 | 44398,51 | 44898,51 | 72088,88 | 72088,88 | 72088,88 | 47809,99 | 161434,37 |
| 15.Prix de reference reel | 255915,93 | 336269,73 | 227318,55 | 335016,08 | 245503,13 | 354307,71 | 344011,84 | 182877,51 | 560485,89 |
| 16.Prix de reference applique | 256000,00 | 336000,00 | 227000,00 | 335000,00 | 246000,00 | 354000,00 | 344000,00 | 183000,00 | 560000,00 |
| 17.Difference (24 - 23) | 84,07 | -269,73 | -318,95 | -16,08 | 496,87 | -307,71 | -11,84 | 122,49 | -435,89 |

ANNEX:4

| | COUT REEL SEP | COUT REEL PROFESSION | PROPOSITION MINER 1 | PROPOSITION MINER 2 | PROPOSITION ADOPTEE |
|---------------------|------------------|-------------------------|------------------------|------------------------|------------------------|
| 01. AKULA | 53 | | 59 | 66 | 66 |
| 02. BANDOUNDU | 24 | | 38 | 34 | 34 |
| 03. BENA DIBELE | 68 | | 75 | 85 | 85 |
| 04. BENI | - | 245 | 236 | 245 | 245 |
| 05. BUKAVU | - | 245 | 240 | 245 | 245 |
| 06. BUMBA | 56 | | 63 | 70 | 70 |
| 07. BUNIA | - | 240 | 236 | 245 | 245 |
| 08. BUSINGA | 89 | | 148 | 135 | 135 |
| 09. GOMA | - | 245 | 240 | 250 | 250 |
| 10. ILEBO | 49 | | 56 | 61 | 61 |
| 11. INONGO | 49 | | 56 | 61 | 61 |
| 12. ISIRO | 137 | | 128 | 172 | 172 |
| 13. KALEMIE | 193 | | 225 | 242 | 242 |
| 14. KALUNDU / UVIRA | 230 | | 245 | 265 | 265 |
| 15. KANANGA | 98 | | 117 | 122 | 122 |
| 16. KIKWIT | 53 | | 59 | 66 | 66 |
| 17. KINDU | 205 | | 230 | 250 | 250 |
| 18. KISANGANI | 73 | | 72 | 91 | 91 |
| 19. KOLWEZI | 174 | 296 | 200 | 230 | 296 |
| 20. LIKASI | 175 | 265 | 200 | 230 | 265 |
| 21. LUBUMBASHI | 183 | 242 | 215 | 250 | 242 |
| 22. MBANDAKA | 33 | | 45 | 44 | 44 |
| 23. MUENE DITU | 118 | | 137 | 150 | 150 |
| 24. MUNGBERE | 147 | | 138 | 184 | 184 |

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CALCUL DU P.M.F. FISCAL

Date = 05/02/1990.
Taux de change \$/Z Z = 474,20

| | ESS ENCE | | PETROLE | | GASOIL | | FOMI | GAZ | |
|---------------------------------|----------|----------|----------|----------|----------|----------|----------|----------|-----------|
| | Ouest | Est | Ouest | Est | Ouest | Est | Sud | Ouest | Ouest |
| Densite des produits | 0,74 | 0,74 | 0,79 | 0,79 | 0,84 | 0,84 | 0,84 | 0,98 | (en T) |
| Assiette fiscale (en \$/T) | 264,00 | 264,00 | 266,00 | 266,00 | 241,00 | 241,00 | 241,00 | 137,00 | |
| Prix moyen (\$/m3), excepte Gaz | 195,36 | 195,36 | 210,14 | 210,14 | 202,44 | 202,44 | 202,44 | 134,25 | |
| P.M.F. (en Z/m3), excepte Gaz | 92756,93 | 92756,93 | 99774,47 | 99774,47 | 96118,51 | 95112,51 | 96118,51 | 63746,65 | 215245,83 |

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| | | | | | | | | | | | |
|--|---|-----------|---|-----------|---|-----------|---|-----------|---|-----------|---|
| Taux = 501,79 Z pour 1 dollar | : | ESS ENCE | : | PET ROLE | : | GASOIL | : | FOMI | : | GAZ | : |
| | : | Ouest | : | Est | : | Ouest | : | Est | : | Sud | : |
| | : | Ouest | : | Est | : | Ouest | : | Est | : | Sud | : |
| VOLUME : Total=60.190 m3 | : | 10750 m3 | : | 800 m3 | : | 3000 m3 | : | 300 m3 | : | 32500m3 | : |
| | : | 2800 m3 | : | 5000 m3 | : | 5000 m3 | : | 40 T | : | | : |
| 1.P.M.F. | : | 84507,85 | : | 205768,37 | : | 101118,71 | : | 214401,29 | : | 98303,77 | : |
| 2.Frais allegement transport & stock SOZIR: | : | 6247,29 | : | 0,00 | : | 6247,29 | : | 0,00 | : | 6247,29 | : |
| 3.Frais bancaires (8,9% du PMF) | : | 7521,20 | : | 18313,39 | : | 8999,57 | : | 19081,72 | : | 8749,04 | : |
| | : | 18524,95 | : | 18550,26 | : | 6501,38 | : | 20245,85 | : | | : |
| 4.Total P.M.G.D. | : | 98276,34 | : | 224081,76 | : | 116365,57 | : | 233483,01 | : | 113300,10 | : |
| | : | 226670,51 | : | 226980,17 | : | 85797,86 | : | 253974,62 | : | | : |
| 5.Caisse de stabilisation | : | 0,00 | : | 0,00 | : | 0,00 | : | 0,00 | : | 0,00 | : |
| 6.Perte MEP (1% PMGD pour essence et | : | | : | | : | | : | | : | | : |
| 0,5% pour autres produits) | : | 982,76 | : | 2240,82 | : | 581,83 | : | 1167,42 | : | 566,50 | : |
| 7.Charges d'exploitation S.E.P. | : | 28881,75 | : | 6784,86 | : | 37198,35 | : | 14423,58 | : | 39560,47 | : |
| 8.Charges d'exploitation Societe Commerc. | : | 41723,96 | : | 8577,93 | : | 17402,62 | : | 22874,85 | : | 17811,05 | : |
| 9.Charges d'exploitation SOZIR | : | 4908,15 | : | 0,00 | : | 4908,15 | : | 0,00 | : | 4908,15 | : |
| 10.Marge Societes Commerciales (10% PMGD) | : | 9827,63 | : | 22408,18 | : | 11636,56 | : | 23348,30 | : | 11330,01 | : |
| | : | 22667,05 | : | 22698,02 | : | 8579,79 | : | 25397,46 | : | | : |
| 11.Total frais de distribution | : | 86324,26 | : | 40011,79 | : | 71727,50 | : | 61814,14 | : | 74176,17 | : |
| | : | 43372,00 | : | 53750,58 | : | 55095,96 | : | 160437,07 | : | | : |
| 12.PMF fiscal (en Z/m3) | : | 98029,69 | : | 98029,69 | : | 105446,15 | : | 105446,15 | : | 101582,37 | : |
| 13.Droit d'entree (15 % du PMF fiscal) | : | 14704,45 | : | 14704,45 | : | 15816,92 | : | 15816,92 | : | 15237,36 | : |
| 14.Droit d'accise (15 % de (12) + (13)) | : | 16910,12 | : | 16910,12 | : | 18189,46 | : | 18189,46 | : | 17522,96 | : |
| 15.Surtaxe de transport (55%-15%-45%-45%)+F: | : | 81103,97 | : | 81103,97 | : | 23792,70 | : | 23792,70 | : | 68763,00 | : |
| | : | 68763,00 | : | 68763,00 | : | 45604,01 | : | 153985,70 | : | | : |
| 22.Total Parafiscalites | : | 112718,55 | : | 112718,55 | : | 57799,09 | : | 57799,09 | : | 101523,31 | : |
| | : | 101523,31 | : | 101523,31 | : | 67330,94 | : | 227348,47 | : | | : |
| 23.Prix de reference reel | : | 297319,14 | : | 376812,09 | : | 245892,15 | : | 353096,24 | : | 288999,58 | : |
| 24.Prix de reference applique | : | 297000,00 | : | 377000,00 | : | 246000,00 | : | 353000,00 | : | 289000,00 | : |
| 25.Difference (24 - 23) | : | -319,14 | : | 187,91 | : | 107,85 | : | -96,24 | : | 0,42 | : |
| | : | 434,18 | : | -254,06 | : | -224,76 | : | 239,84 | : | | : |

ANNEX 7: PRACTICAL PROCEDURES FOR IMPLEMENTING CIP

1) Calls for tender

Currently distribution companies which import via the southern and eastern routes of the country import for their own commercial activities. Under the CIP system, the companies would group together and put out calls for tender among the suppliers CALTEX, KOBIL, KENYA SHELL, and TOTAL for the eastern route; TRADIMEX, SUDEXCO and AFRI-ITALIA for the south. USAID could verify the bids and check the proposed prices as well as the origin of the products.

2) Eligibility Criteria

Financing of imports should only be considered for large distribution companies: MOBIL, FINA, SHELL, and PETROZAIRE in association with ELF-AQUITAINE and AGIP.

The recently formed, small, private companies in the southern part of the country will not be eligible for USAID's financing program:

- only companies having a bulk distribution network are to benefit from the program. This condition is justified insofar as the goal of the program is to solve the problems of supplying the retail market.
- only those client companies whose commercial activities do not bring in foreign exchanges are eligible under CIP.

These two conditions effectively eliminate all the small companies serving the captive market GECAMINES.

3) Dispersement of hard currency

The distribution company sends a purchase order to the supplier retained through the competitive bid process.

USAID issues a letter of credit payable in 30 or 60 days depending on the conditions demanded by the supplier.

The transfer in foreign currency to the supplier would be carried out directly by USAID upon reception of the products by the distribution companies.

4) Counterpart in Zairian currency

To ensure that the counterpart in local currency is recovered and remitted to the Office des Routes, the following procedure must be set up:

- when USAID grants a letter of credit, the distribution company

opens a line of credit at a first class bank (Ci example) for the equivalent amount in Zaires. costs resulting from the granting of credit are co price structure for petroleum products.

- The counterpart in Zairian currency is paid to th Routes on the instruction of USAID.

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ANNEX 8: PROCEDURE FOR THE PAYMENT OF GOVERNMENT CONSUMPTION

The Budget Department in conjunction with the Finance Department could set up a special budget procedure for payment of the government's consumption of petroleum products.

1) Hierarchy of expenditures

Fuel expenditures are considered as priority expenditures, on the same level as the salaries of civil servants, in other words, the fuel expenditures would be paid after salaries but before all other operating expenditures of the government.

2) Monthly disbursements

Payments to the oil companies for consumption are made monthly in the form of an advance, equivalent to 1/12 of the annual budget. Adjustment of actual expenditures based on invoices can be carried out on a quarterly basis. This step is necessary for the liquidation of public expenditures.

3) Priority allocation of tax revenues

If the government has defaulted on its payments for a period of 30 consecutive days, the Conseil Ececutif agrees to remit the net tax receipts from the distribution companies to the Office des Routes as a priority, based on the allocation rate in force, i.e. 43% of the monthly total of tax revenues contained in the price structure for petroleum products.

Example: (\$US in millions)

| | |
|--|------|
| Total monthly taxes (1): | 11.7 |
| Monthly public consumption outstanding: | 3.5 |
| Taxes paid to OFIDA: | 8.2 |
| Taxes remitted to Office des Routes (43% of 1) | 5.0 |
| Balance of tax revenue available | 3.2 |